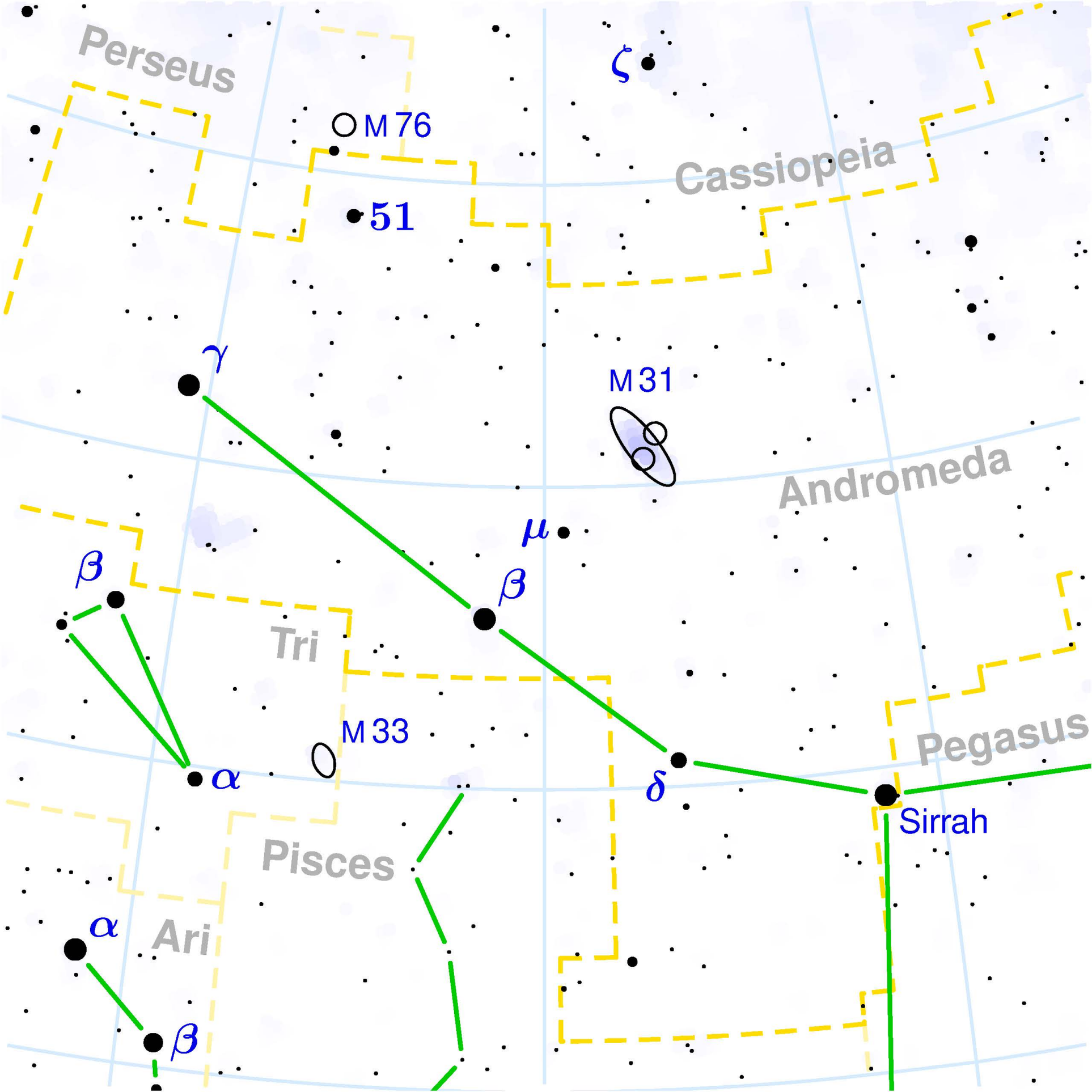
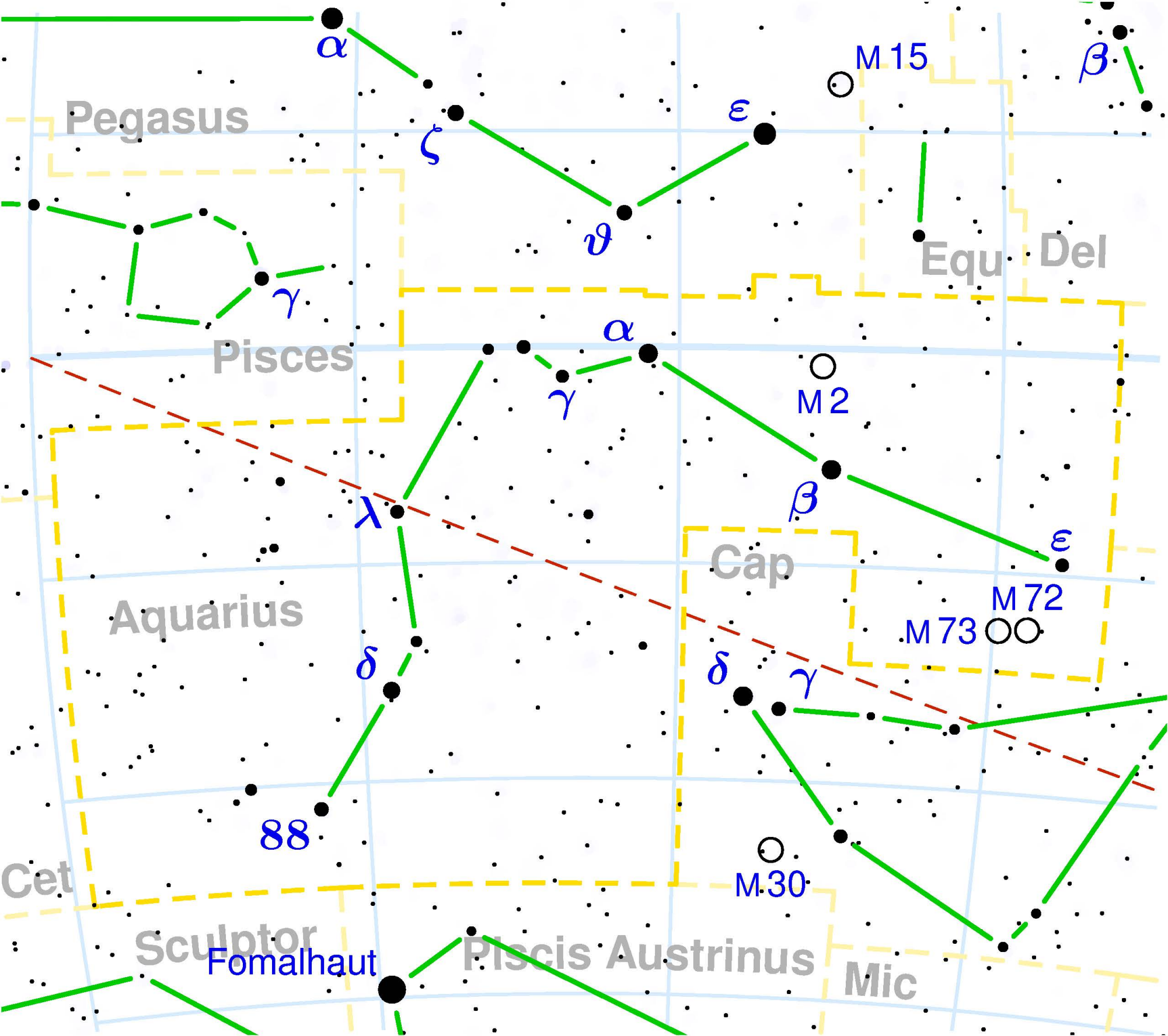
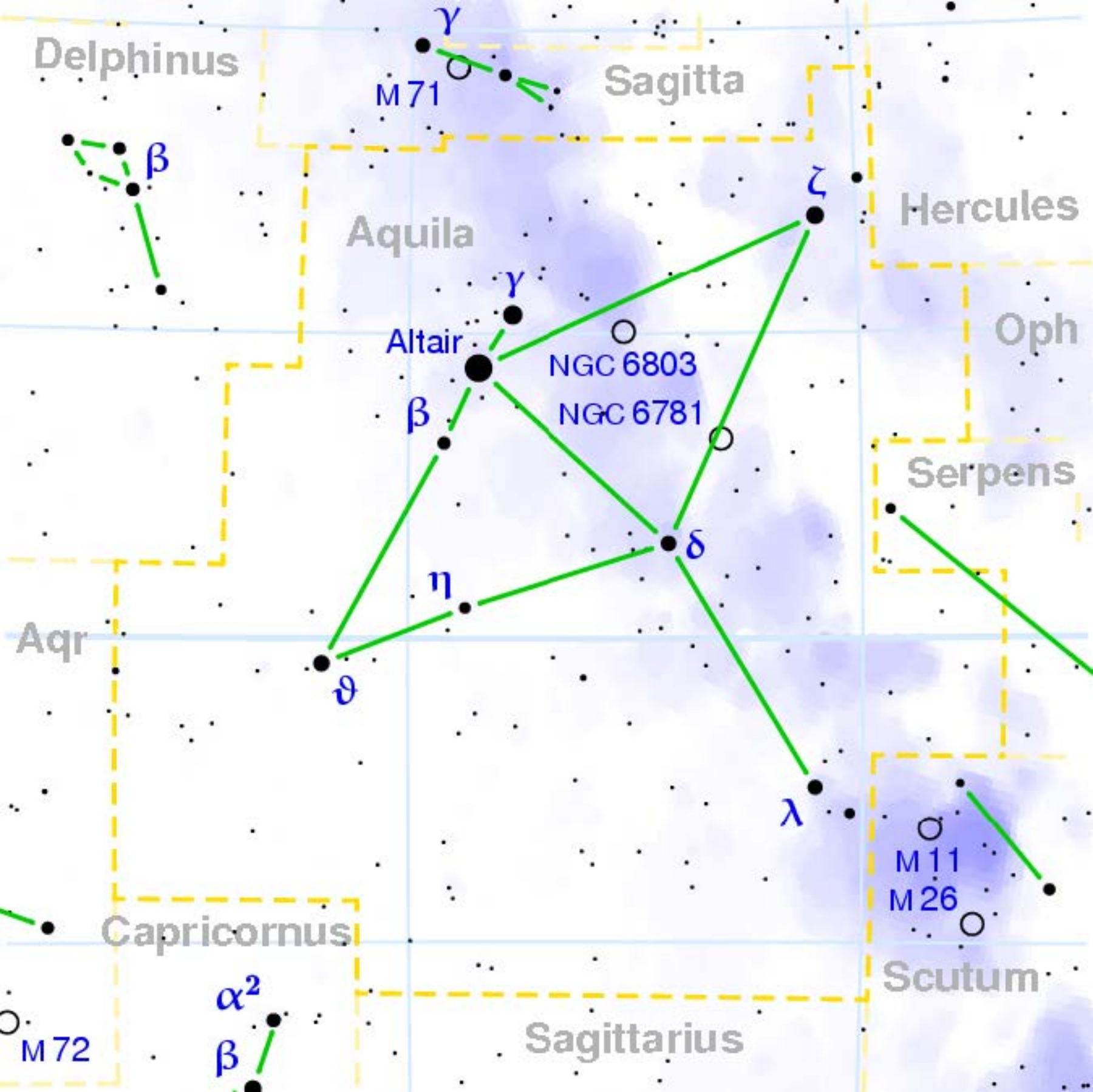
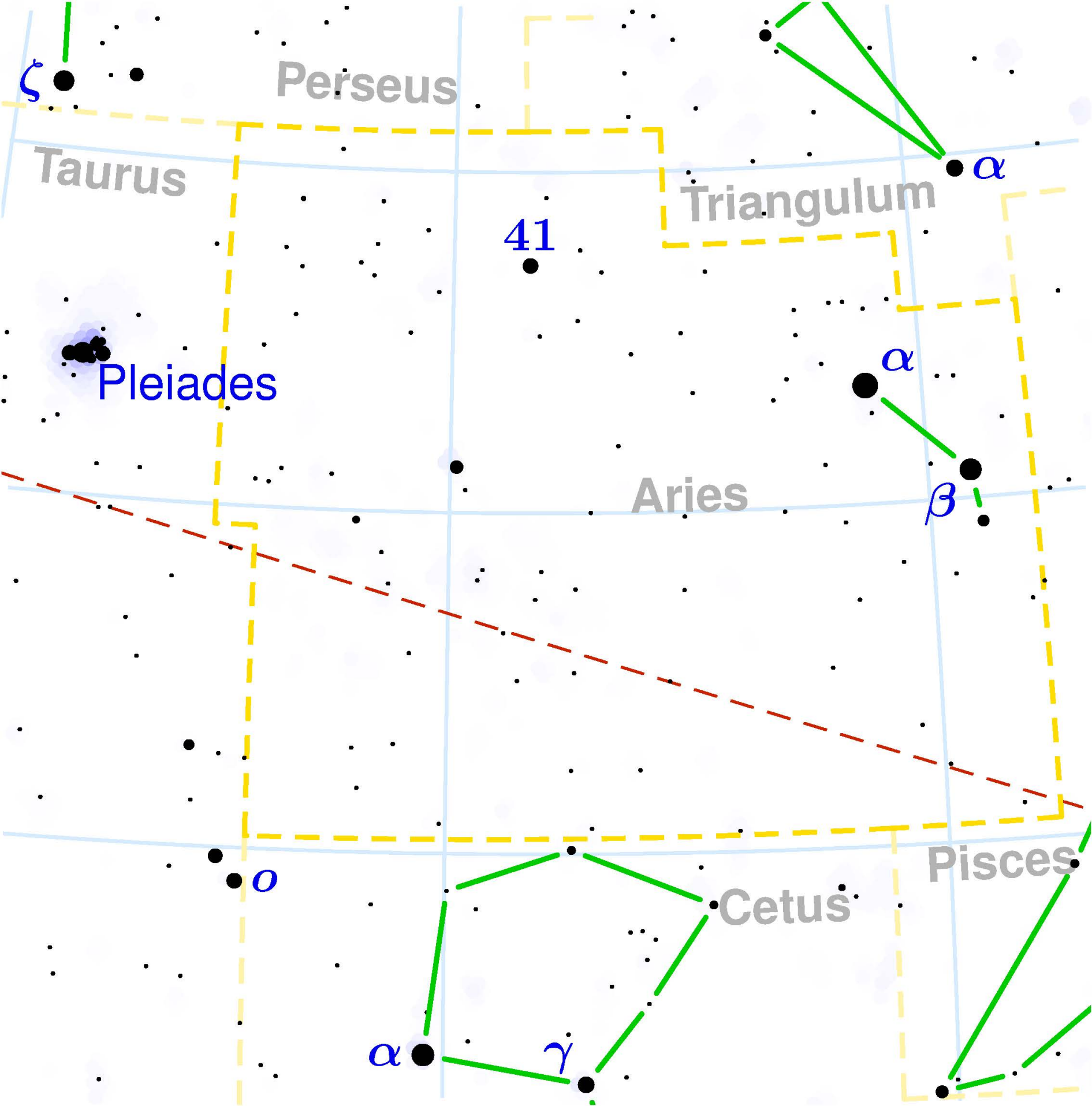
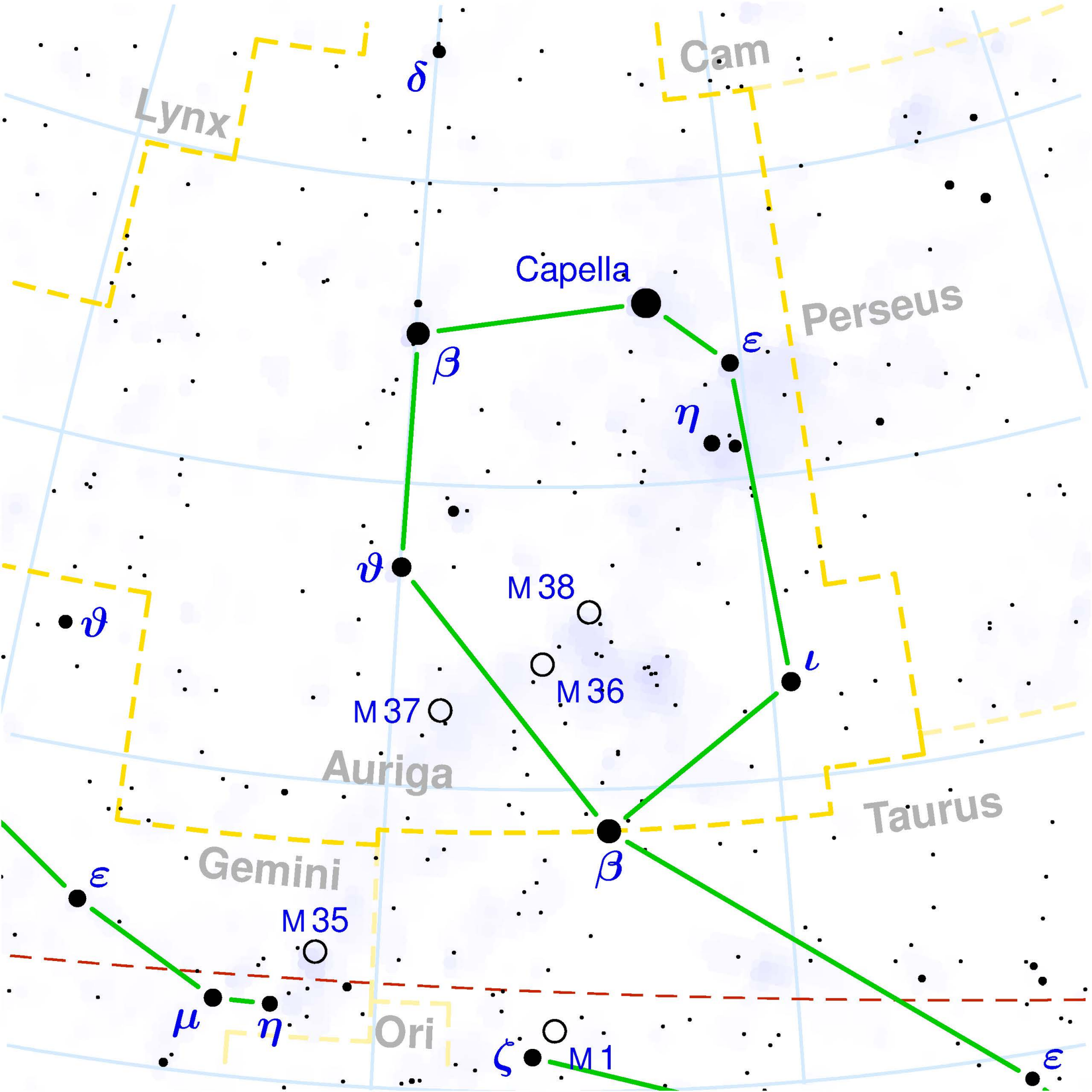
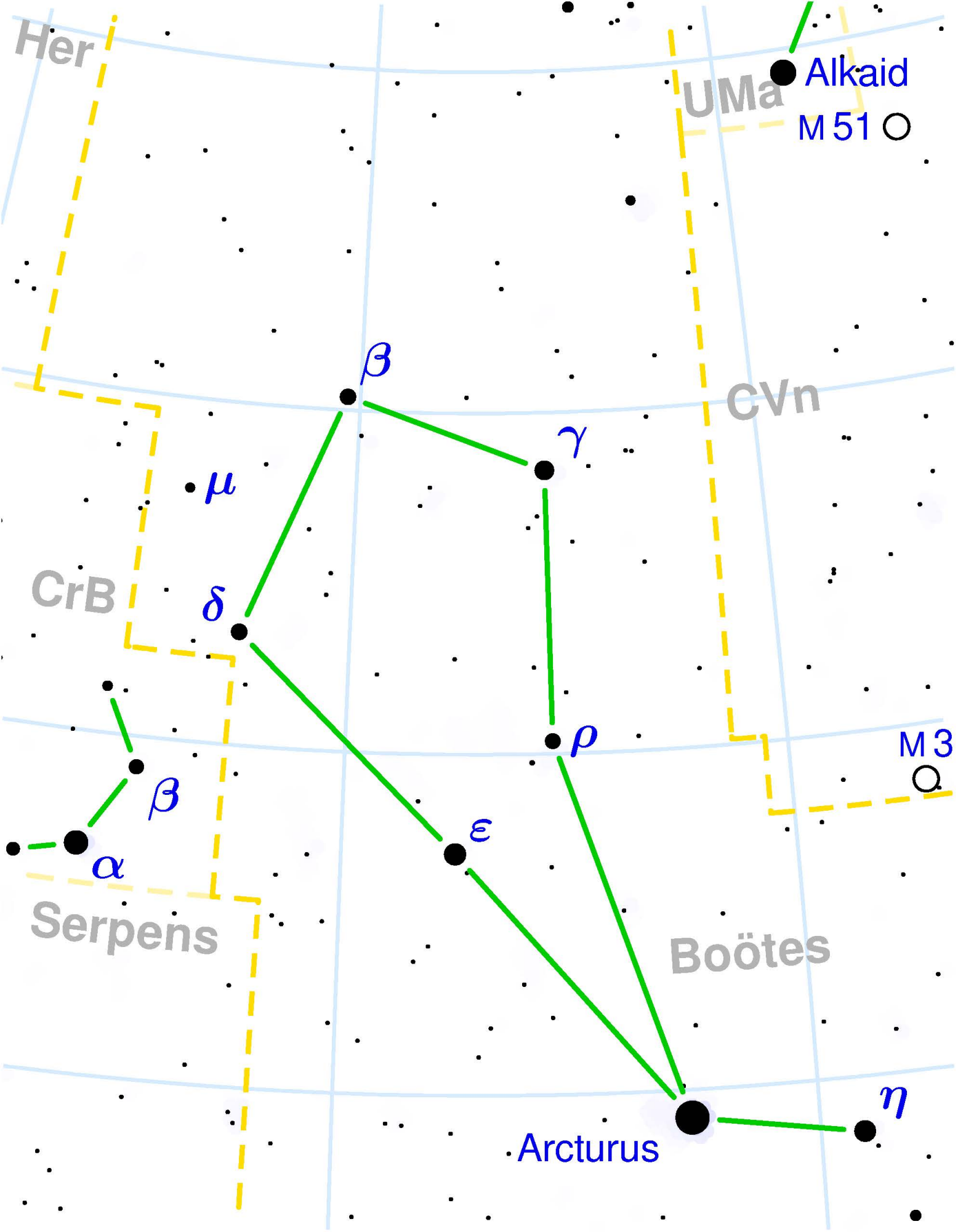

Perseus
ζ
M 76
Cassiopeia
51
γ
M 31
Andromeda
μ
β
β
Tri
M 33
α
δ
Pegasus
Sirrah
Pisces
α
Ari
β

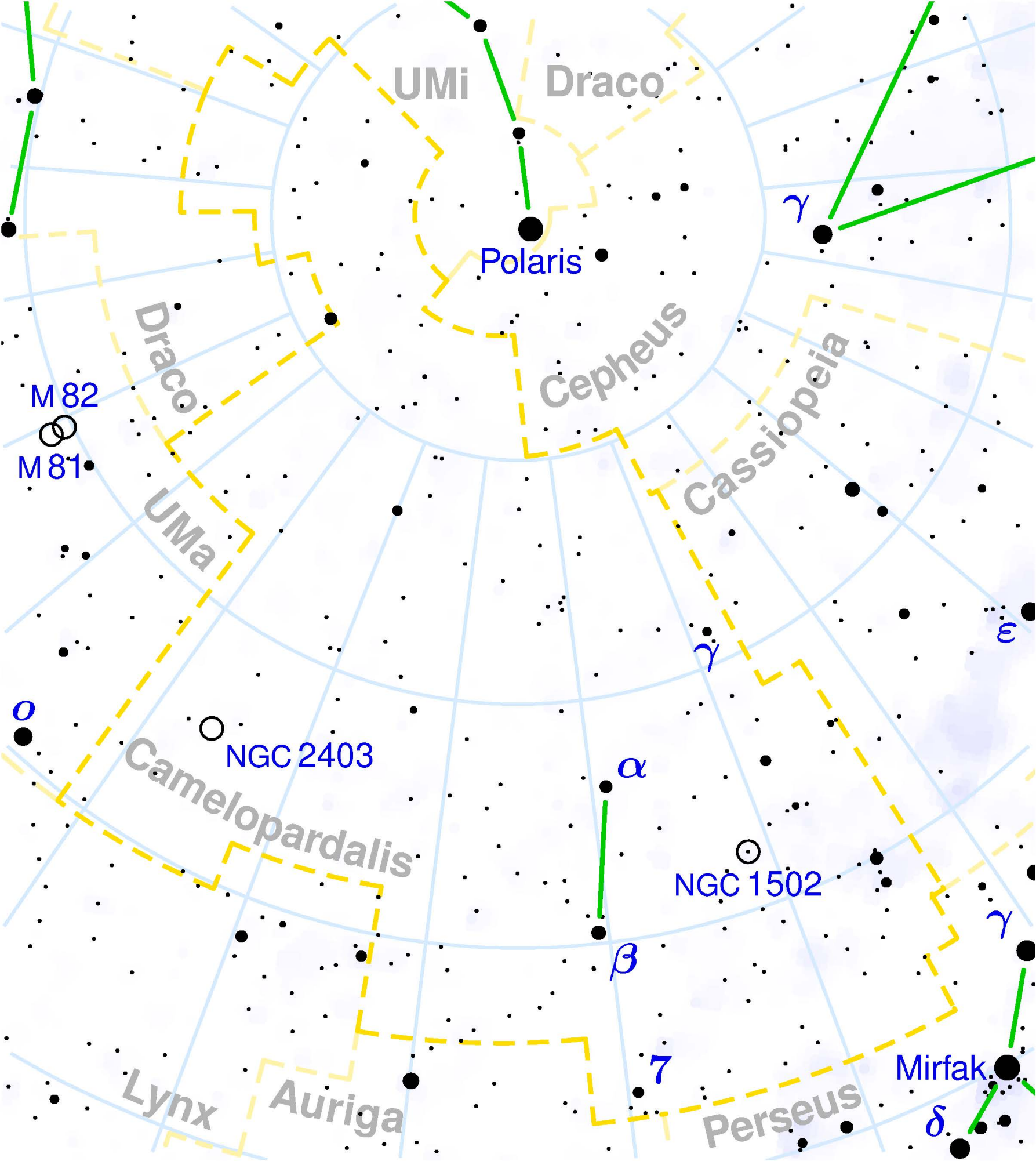

α
M 15
β
Pegasus
ε
ζ
ϑ
Equ
Del
γ
Pisces
α
M 2
γ
β
λ
ε
Cap
Aquarius
M 72
M 73
δ
δ
γ
88
M 30
Cet
Sculptor
Fomalhaut
Piscis Austrinus
Mic

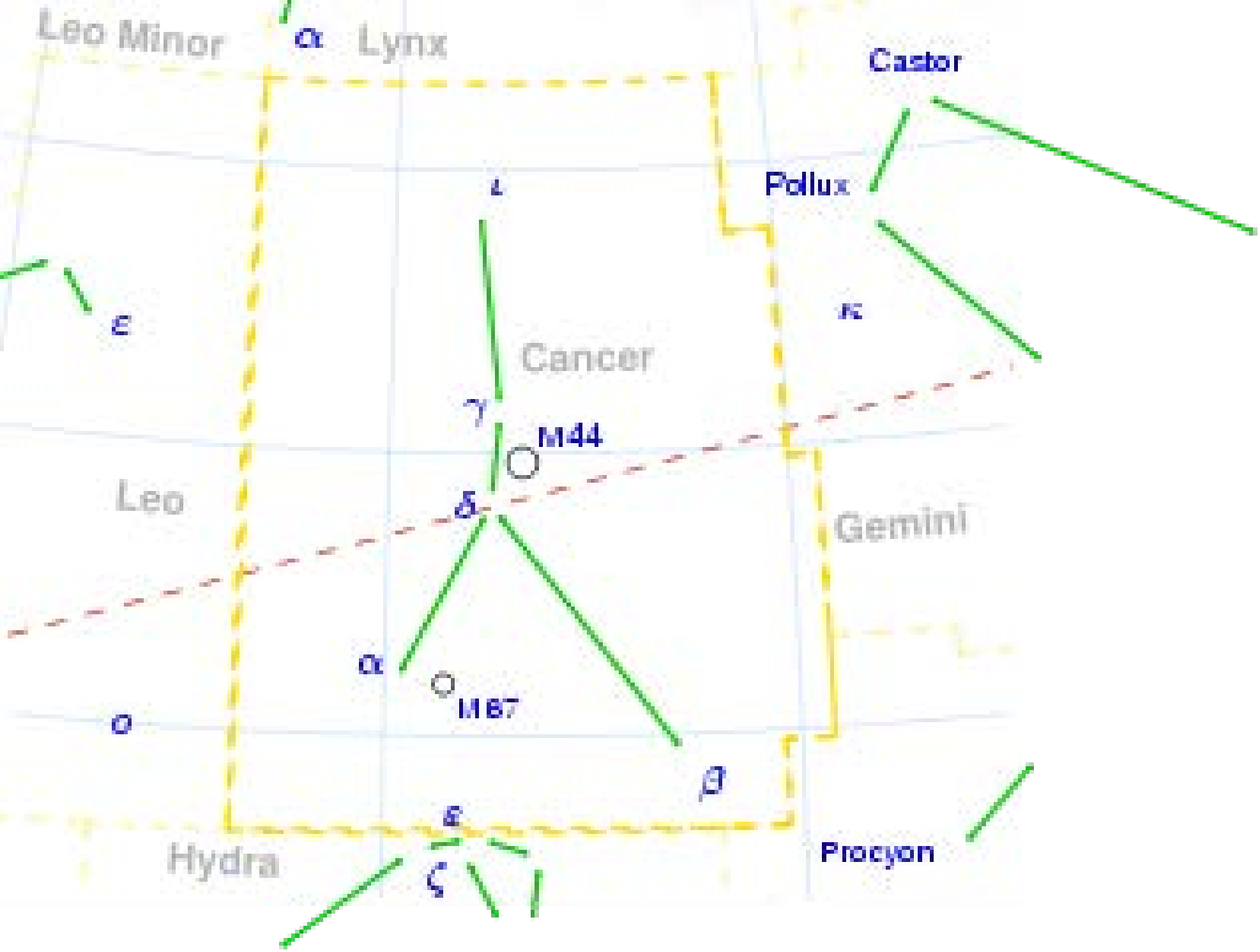

Delphinus
γ
M 71
Sagitta
β
Aquila
ζ
Hercules
γ
Altair
NGC 6803
Oph
β
NGC 6781
Serpens
δ
η
Aqr
ϑ
λ
M 11
M 26
Capricornus
Scutum
α²
M 72
β
Sagittarius

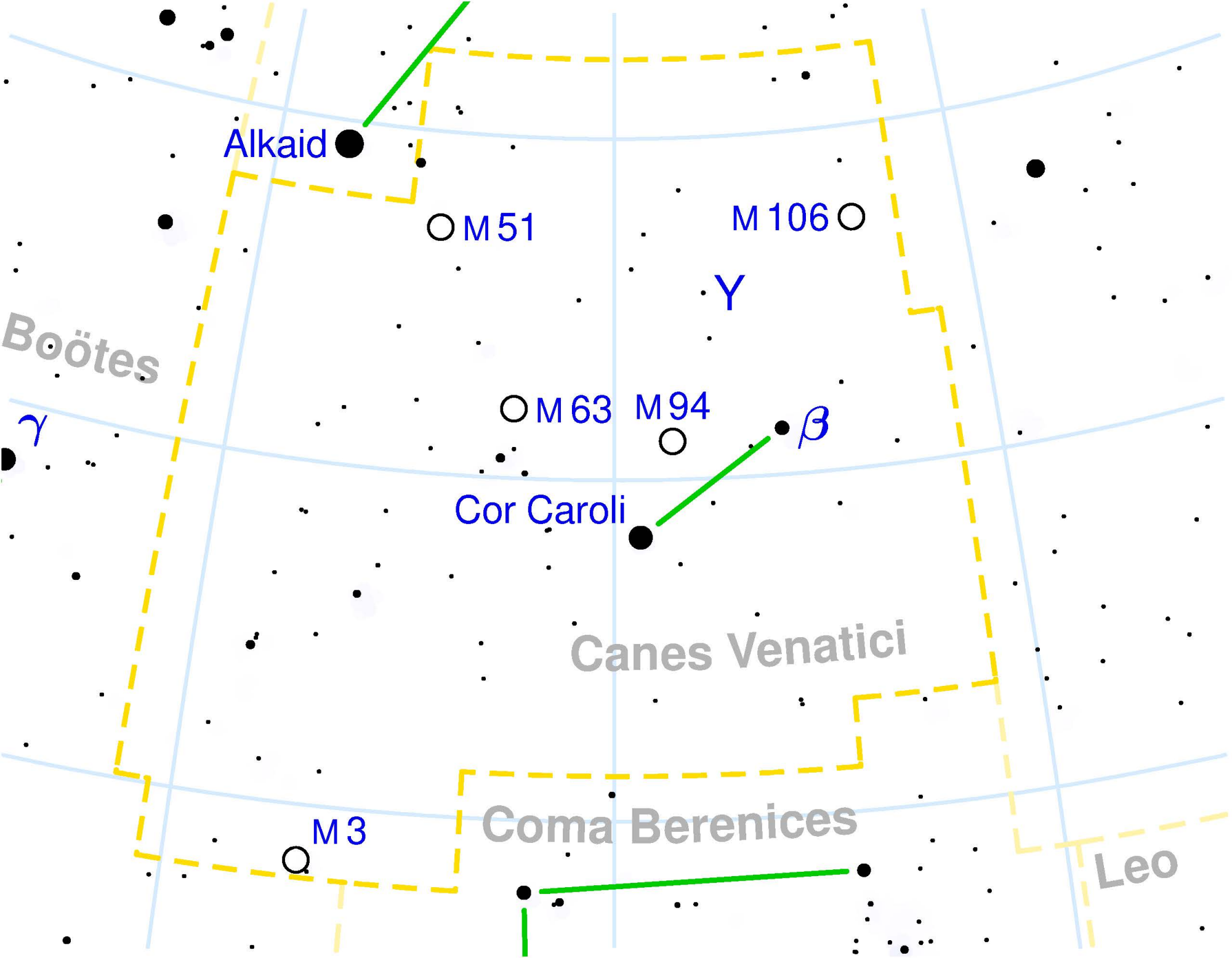

ζ
Perseus
Taurus
α
Triangulum
41
Pleiades
α
β
Aries
Pisces
ο
Cetus
α
γ

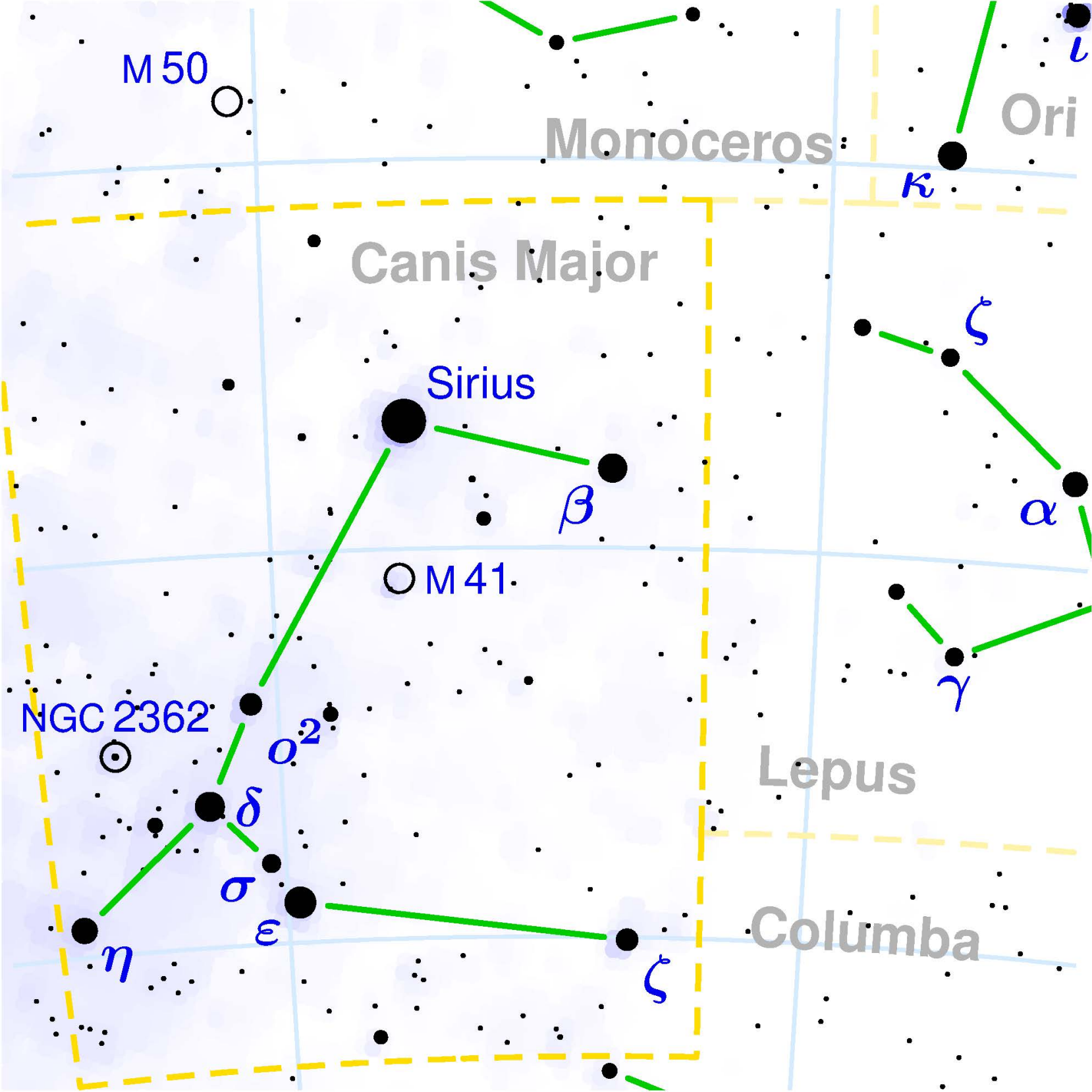

Lynx
δ
Cam
Capella
β
ε
Perseus
η
ϑ
ϑ
M 38
M 36
ι
M 37
Auriga
Taurus
β
Gemini
ε
M 35
μ
η
Ori
ζ
M 1
ε

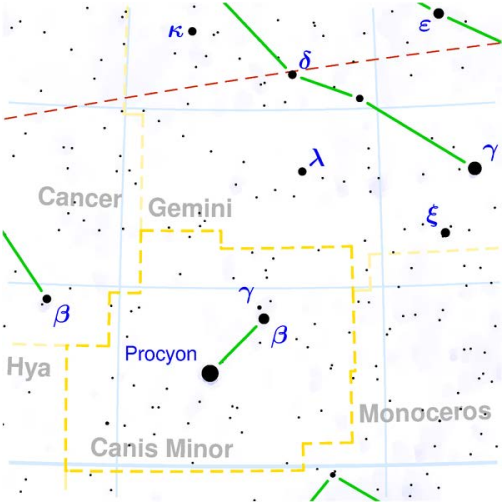

Her
UMa
Alkaid
M 51
β
γ
CVn
μ
CrB
δ
ρ
M 3
β
ε
α
Serpens
Boötes
η
Arcturus

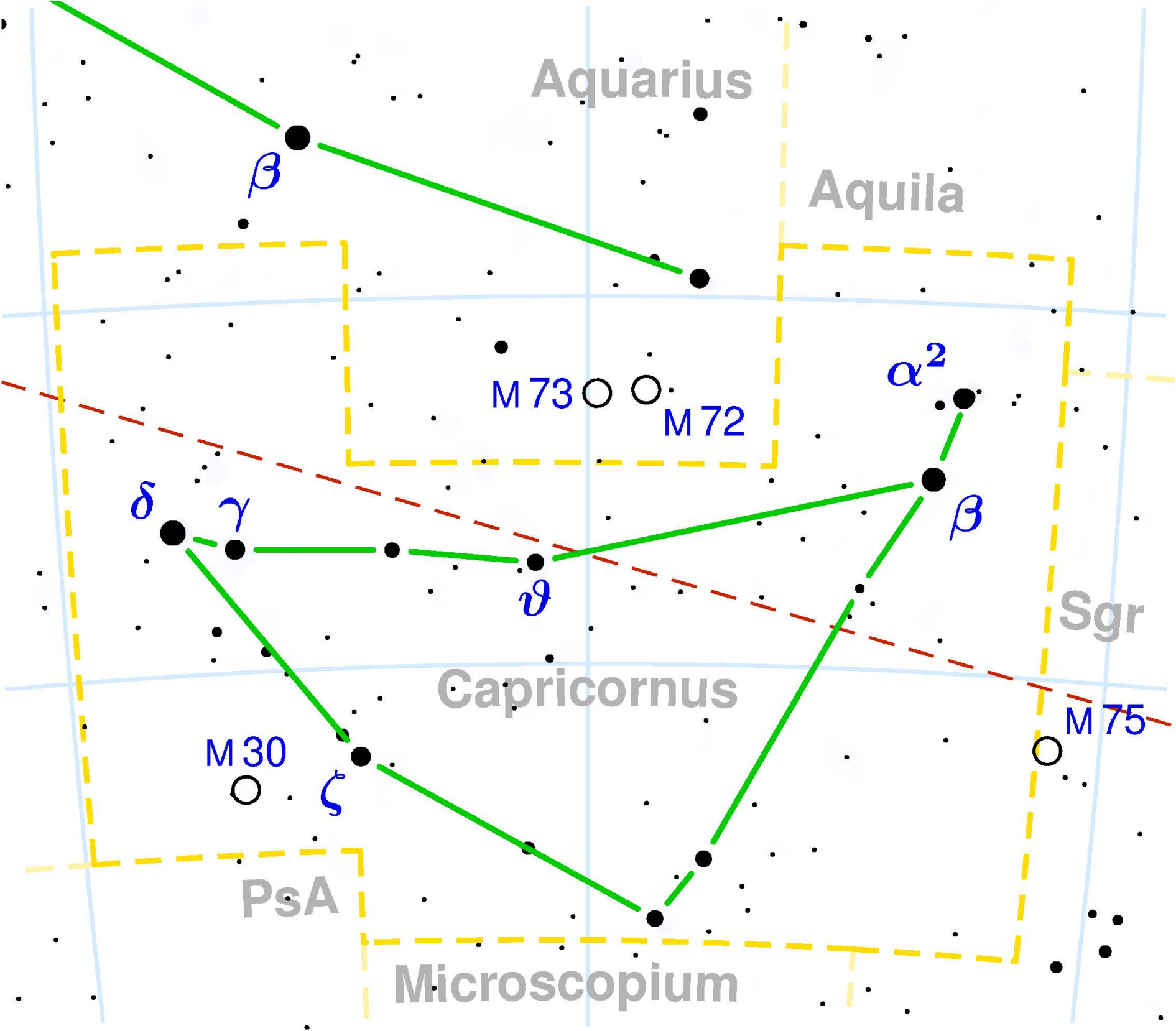

UMi
Draco
Polaris
γ
Draco
Cepheus
Cassiopeia
M 82
M 81
UMa
ε
γ
ο
NGC 2403
Camelopardalis
α
NGC 1502
γ
β
7
Mirfak
Lynx
Auriga
Perseus
δ

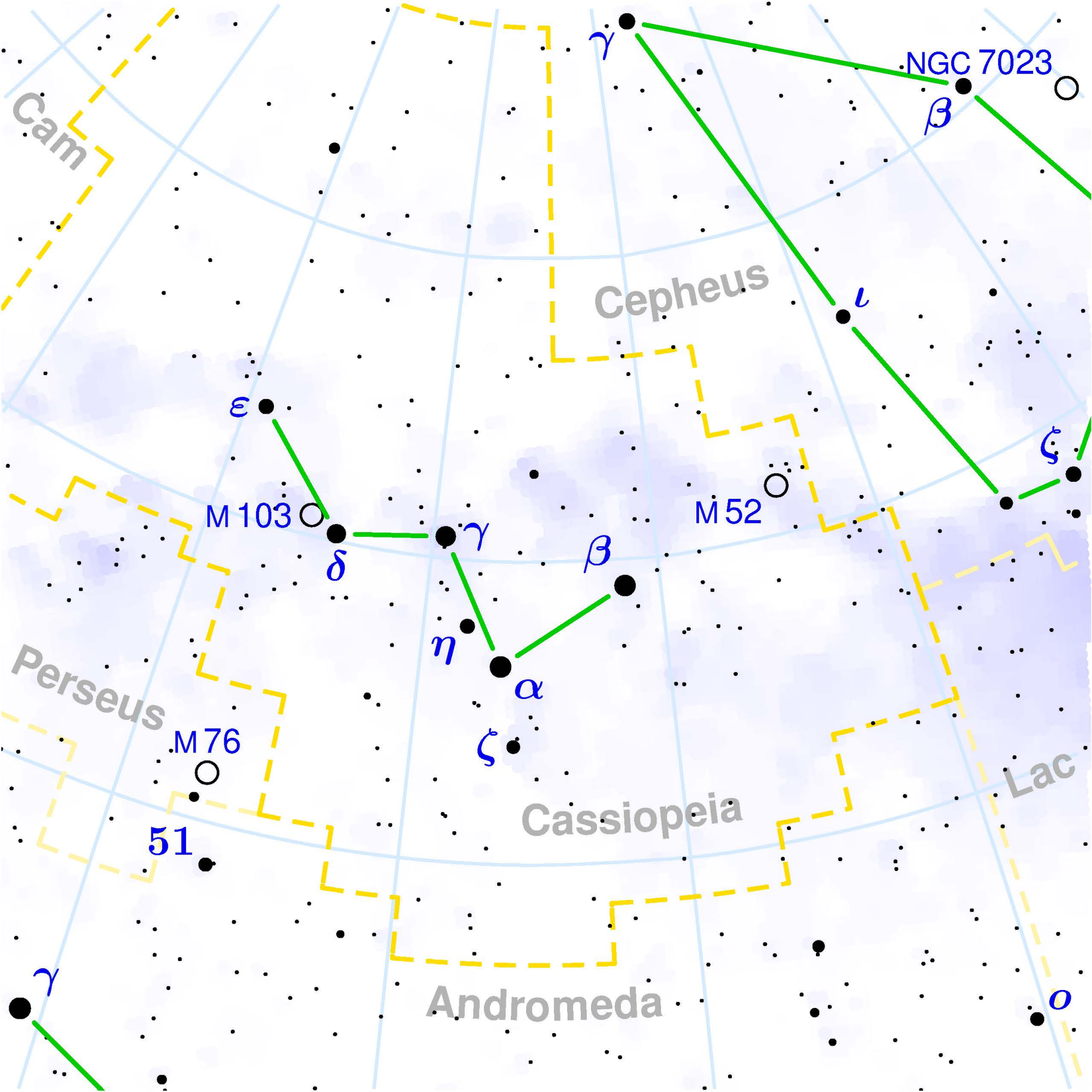

Leo Minor
α
Lynx
Castor
Pollux
ι
ε
κ
Cancer
γ
M44
Leo
δ
Gemini
α
M67
ο
β
ε
Hydra
ζ
Procyon

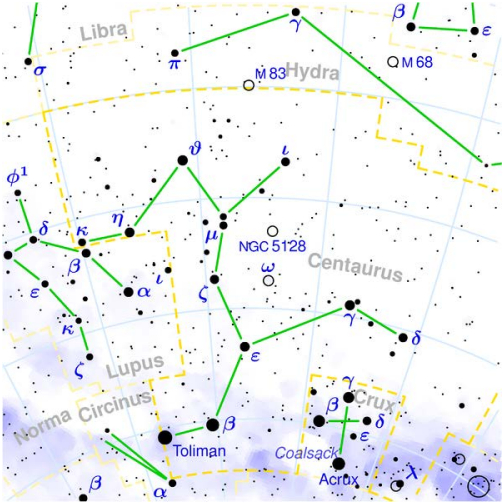

Alkaid
M 51
M 106
Y
Boötes
M 63
M 94
γ
β
Cor Caroli
Canes Venatici
M 3
Coma Berenices
Leo

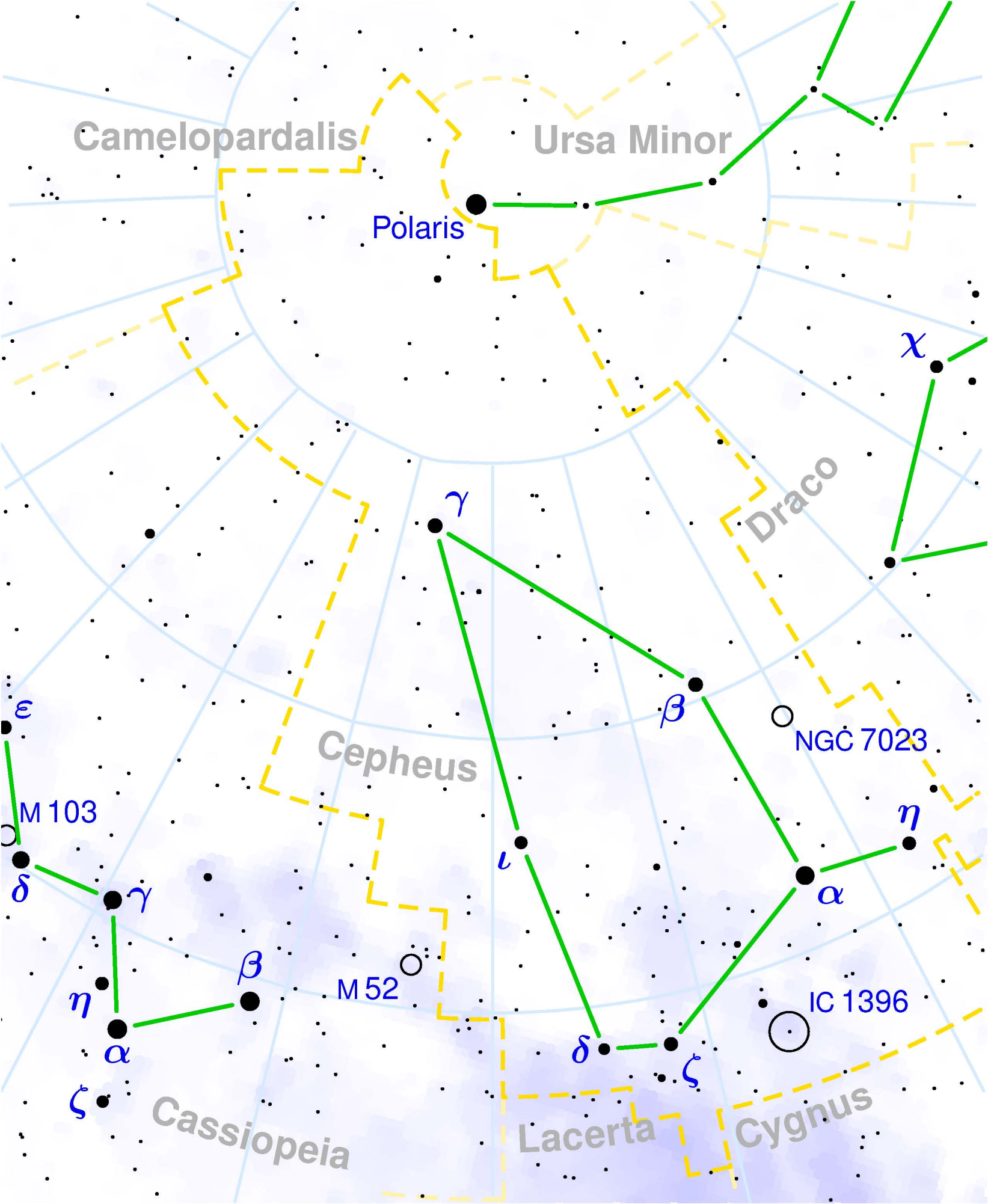

M 50
Monoceros
Ori
ι
κ
Canis Major
ζ
Sirius
β
α
M 41
γ
NGC 2362
o²
δ
Lepus
σ
ε
η
Columba
ζ

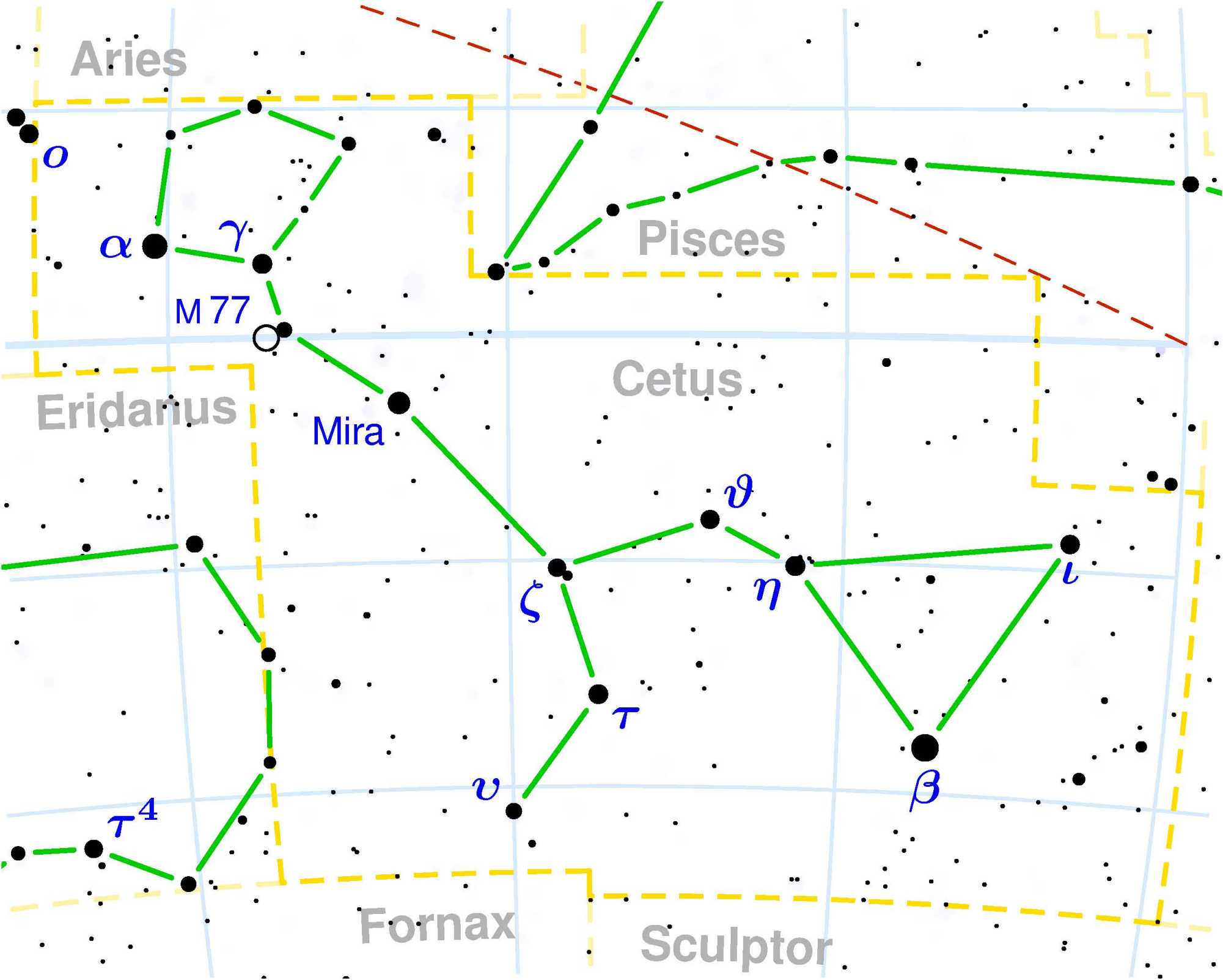

κ
ε
δ
λ
γ
Cancer
Gemini
ξ
γ
β
Procyon
β
Hya
Monoceros
Canis Minor

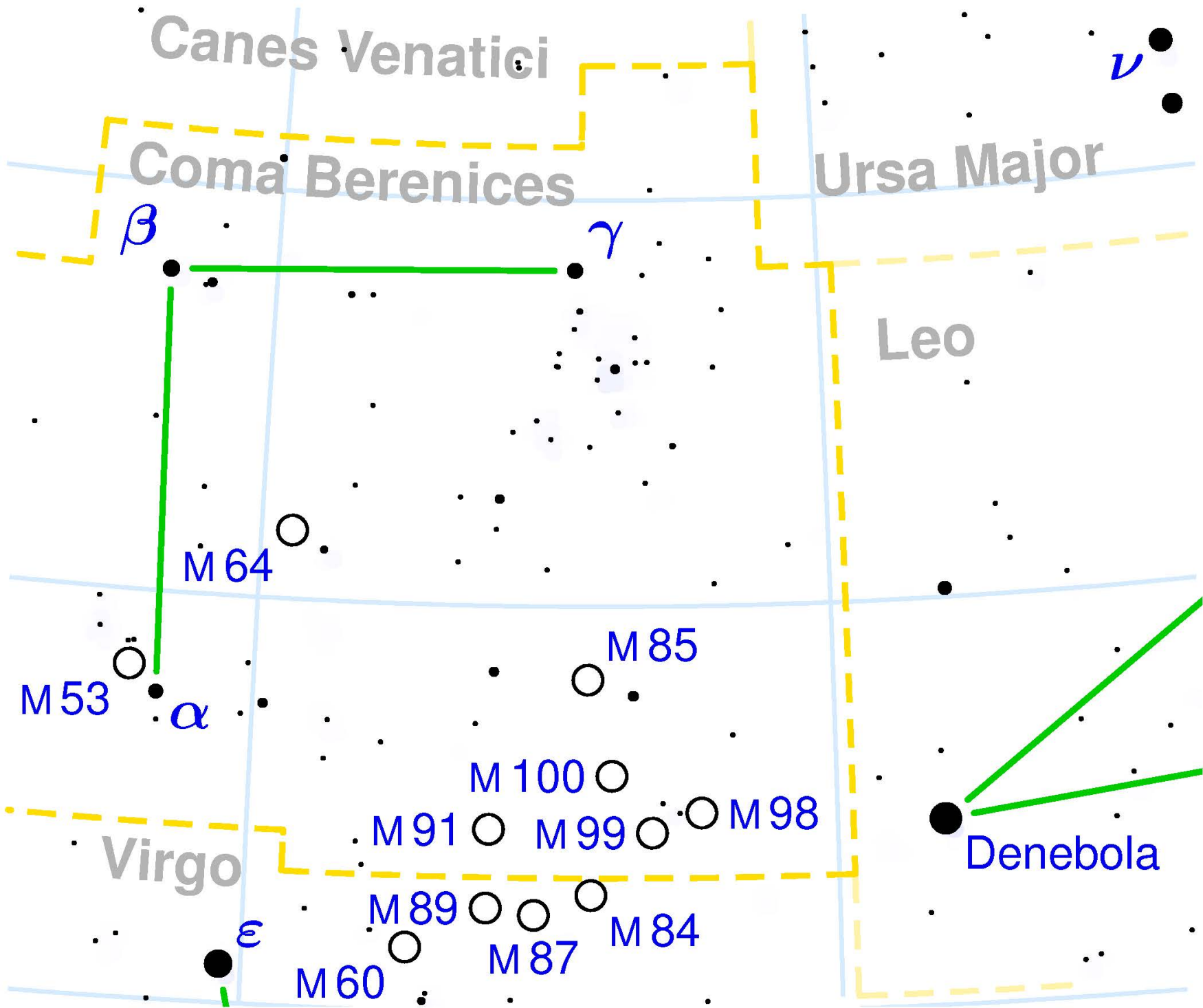

Aquarius
Aquila
Sgr
Capricornus
PsA
Microscopium
β
M 73
M 72
α²
δ
γ
ϑ
β
M 30
ζ
M 75

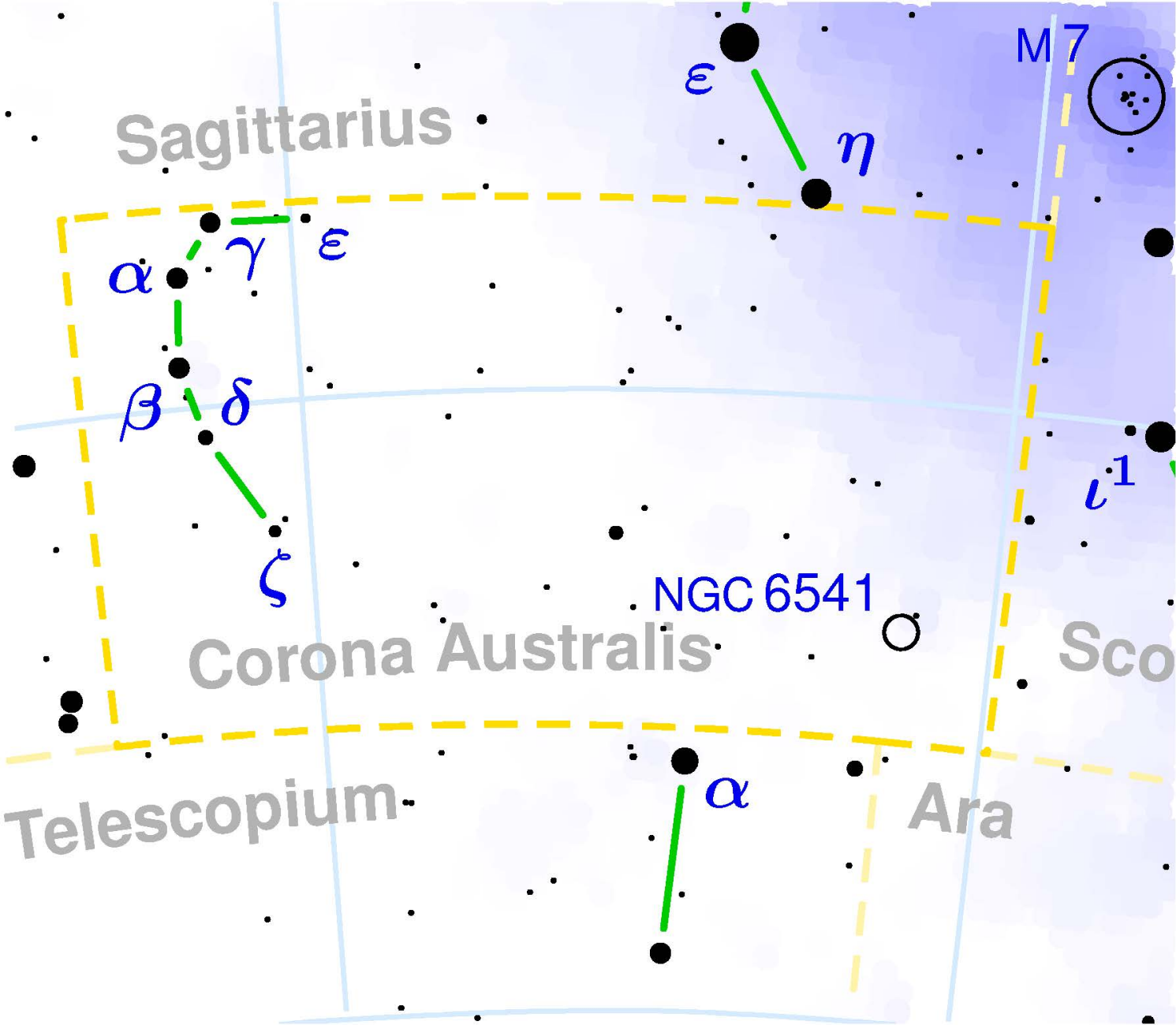

Cam
γ
NGC 7023
β
Cepheus
ι
ε
ζ
M 103
δ
γ
M 52
β
η
α
Perseus
M 76
ζ
Lac
Cassiopeia
51
γ
Andromeda
ο

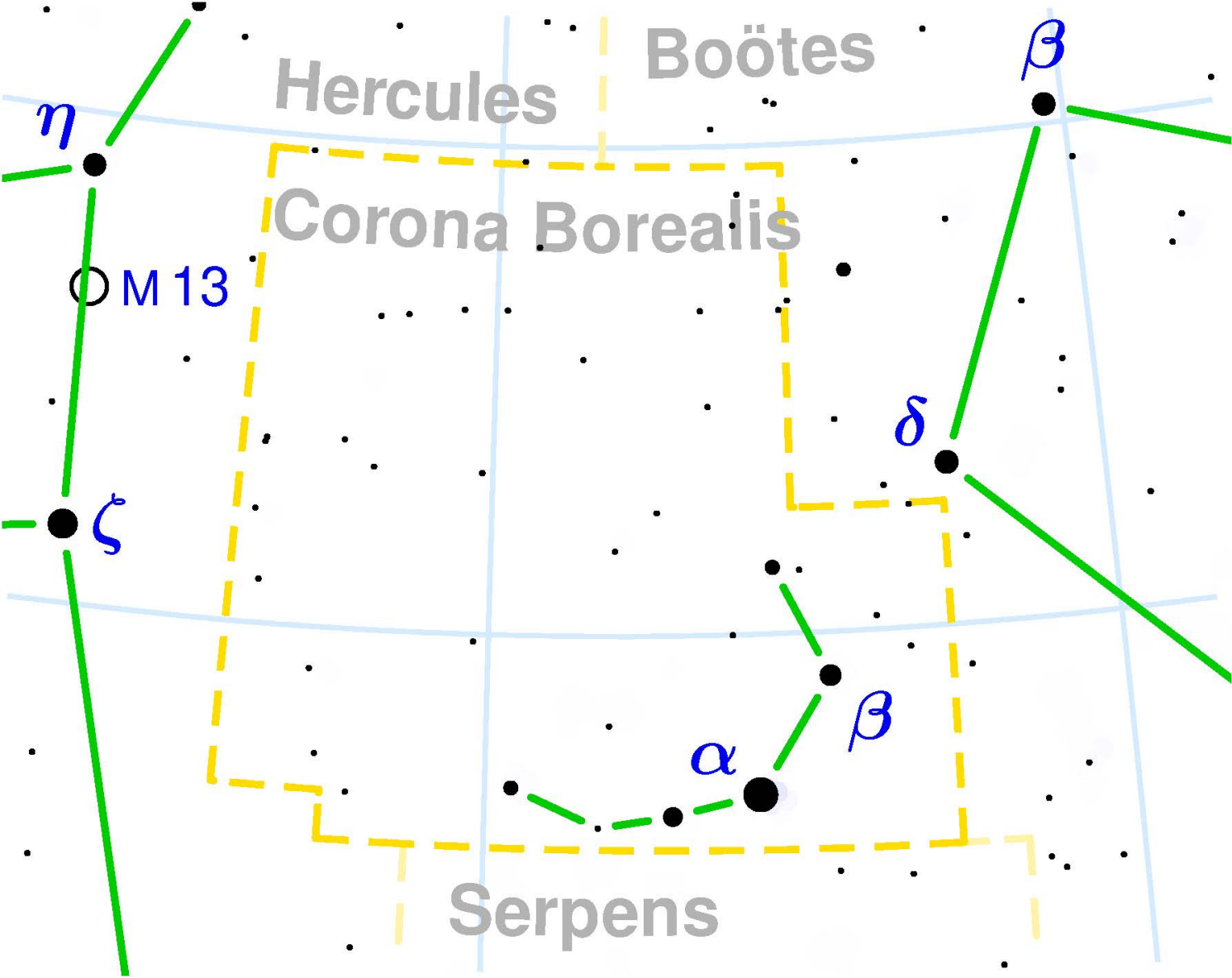

Libra
σ
π
γ
β
ε
M 83
Hydra
M 68
ϑ
ι
ϕ1
δ
κ
η
μ
NGC 5128
Centaurus
β
ω
ε
α
ι
ζ
γ
δ
κ
ε
ζ
Lupus
Norma Circinus
γ
Crux
β
δ
ε
Toliman
β
Coalsack
Acrux
α
χ

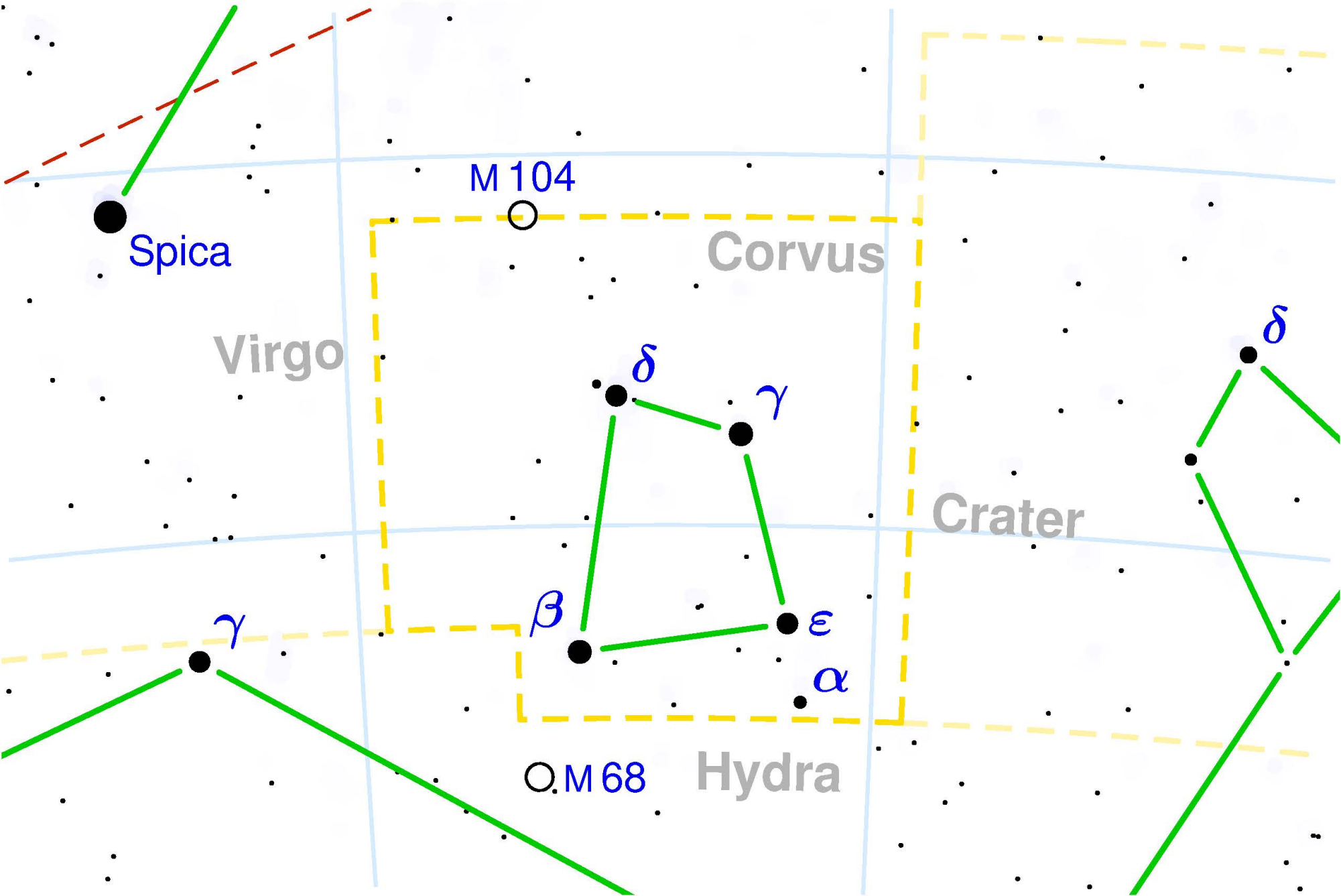

Camelopardalis
Ursa Minor
Polaris
χ
Draco
γ
ε
β
NGC 7023
Cepheus
M 103
η
ι
δ
γ
α
β
M 52
IC 1396
η
α
δ
ζ
ζ
Cassiopeia
Lacerta
Cygnus

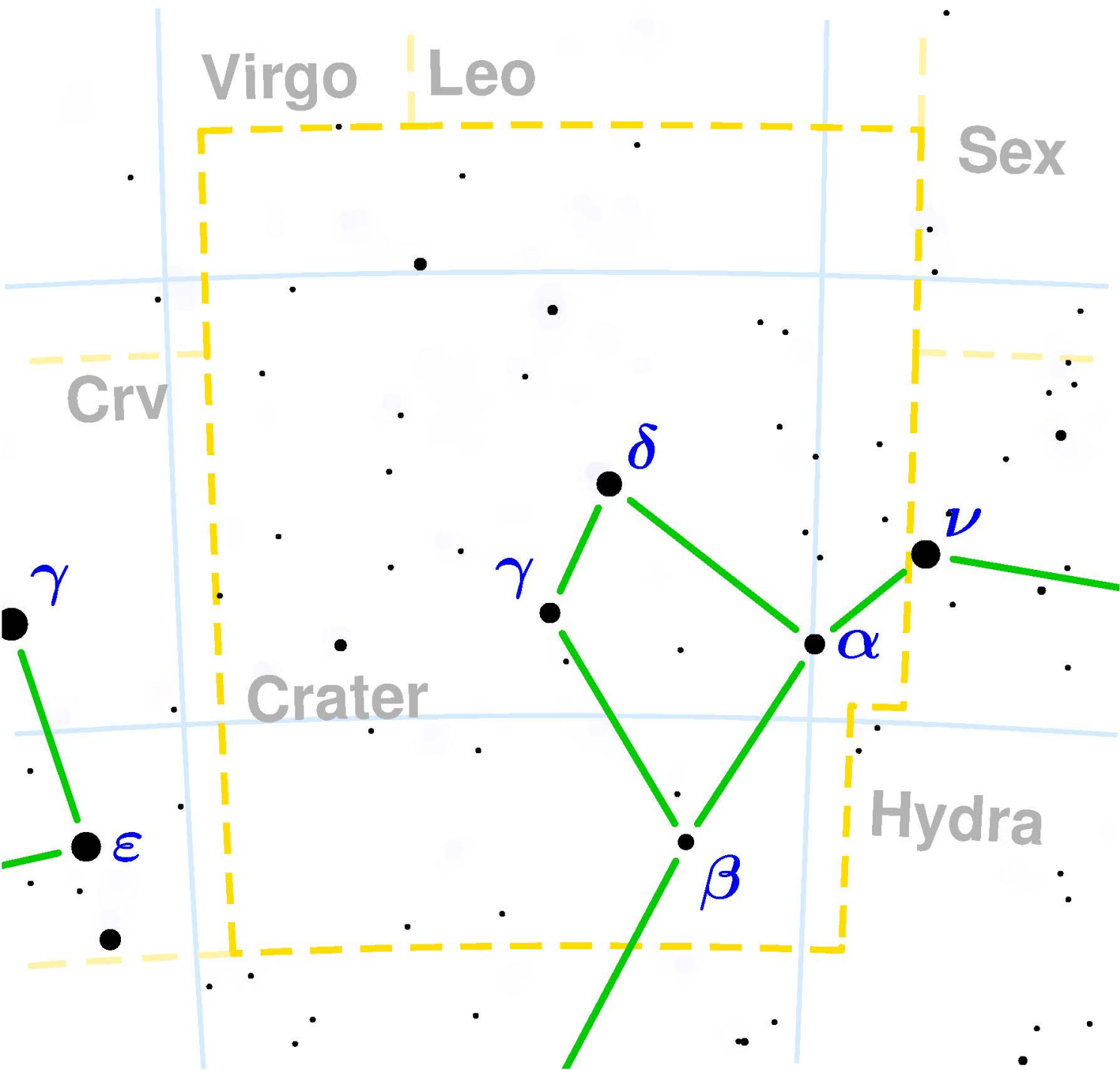

Aries
Pisces
Cetus
Eridanus
Fornax
Sculptor
M 77
Mira
o
α
γ
ϑ
ζ
η
ι
τ
υ
β
τ4

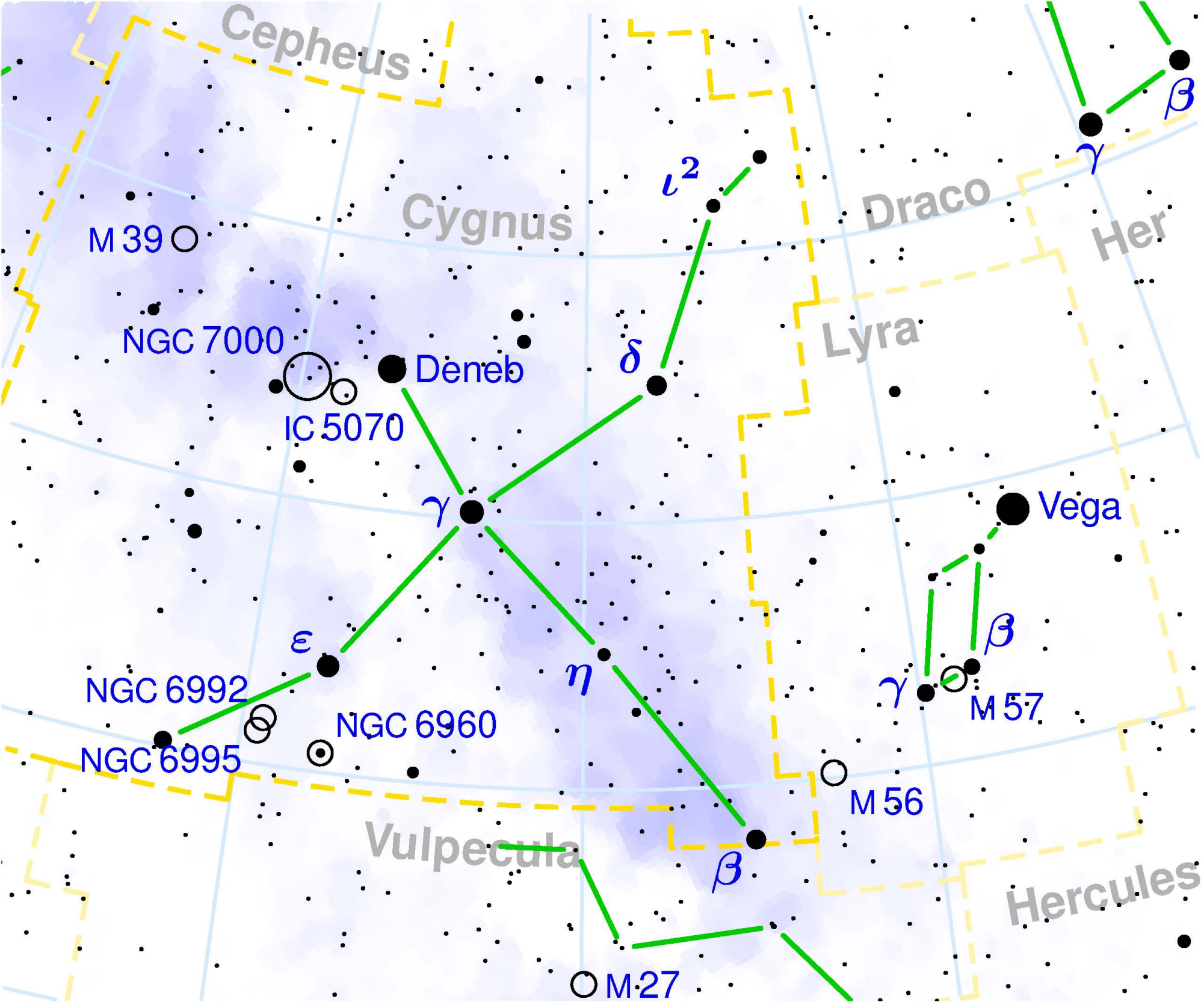

Canes Venatici
Coma Berenices
Ursa Major
Leo
Virgo
β
γ
α
ε
ν
M 64
M 53
M 85
M 100
M 91
M 99
M 98
M 89
M 84
M 87
M 60
Denebola

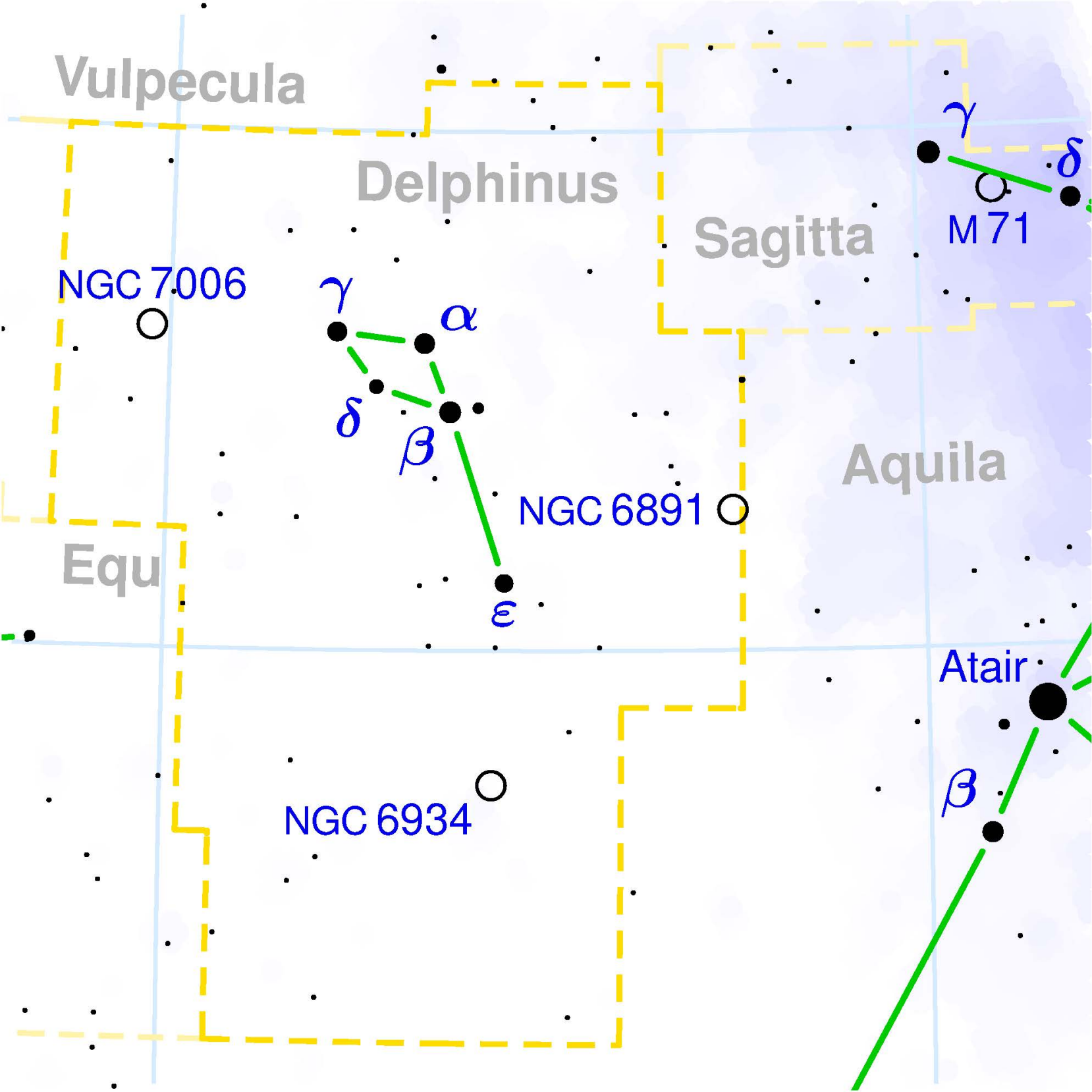

Sagittarius
ε
η
M 7
α
γ
ε
β
δ
ζ
ι1
NGC 6541
Corona Australis
Sco
Telescopium
α
Ara

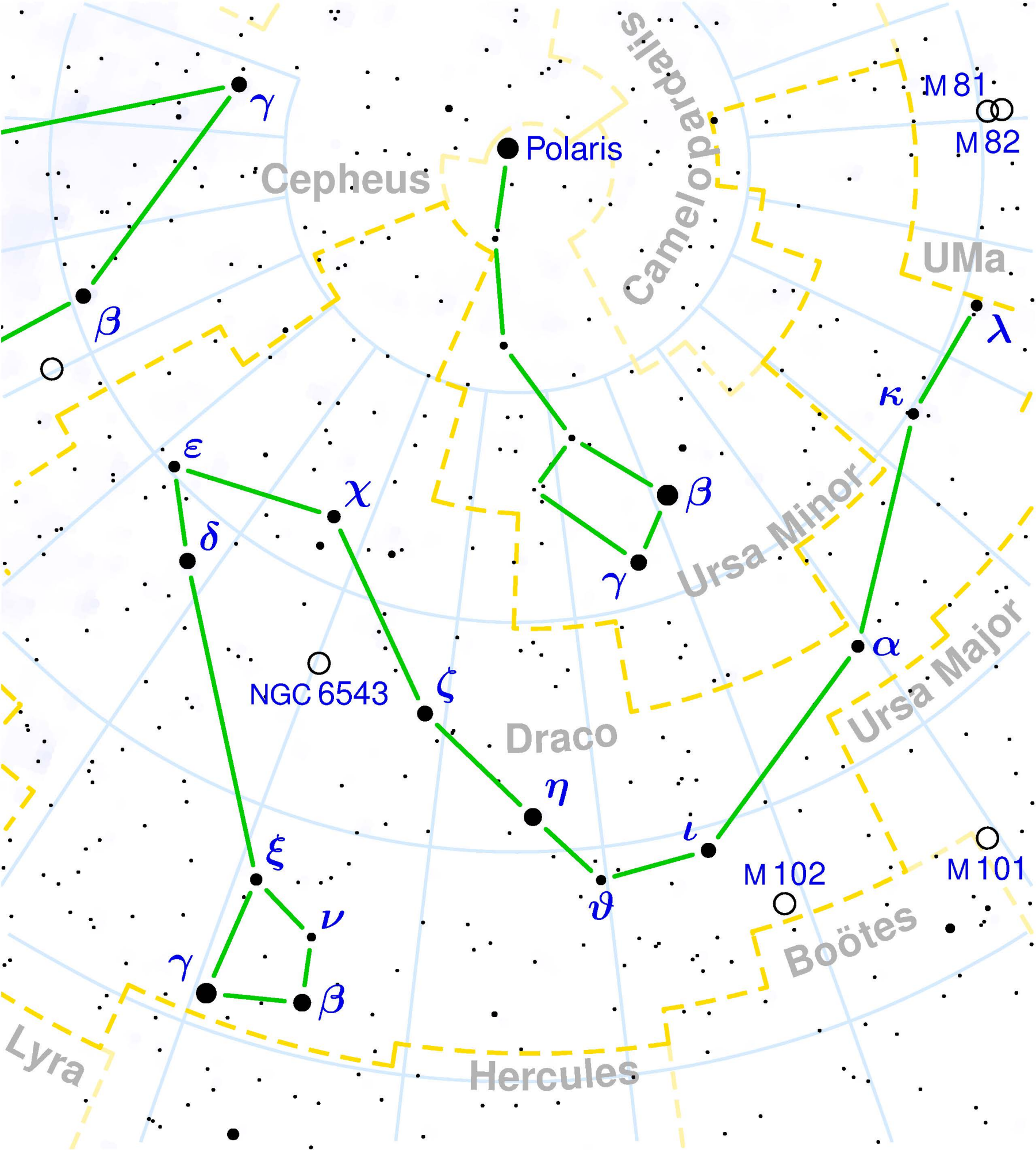

Hercules
Boötes
Corona Borealis
Serpens
η
β
M 13
δ
ζ
α
β

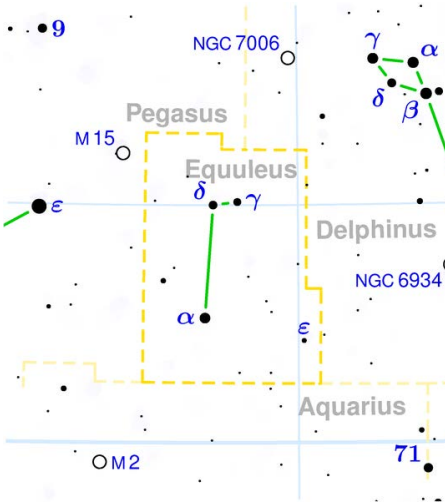

M 104
Spica
Corvus
Virgo
δ
γ
Crater
δ
β
ε
γ
α
M 68
Hydra

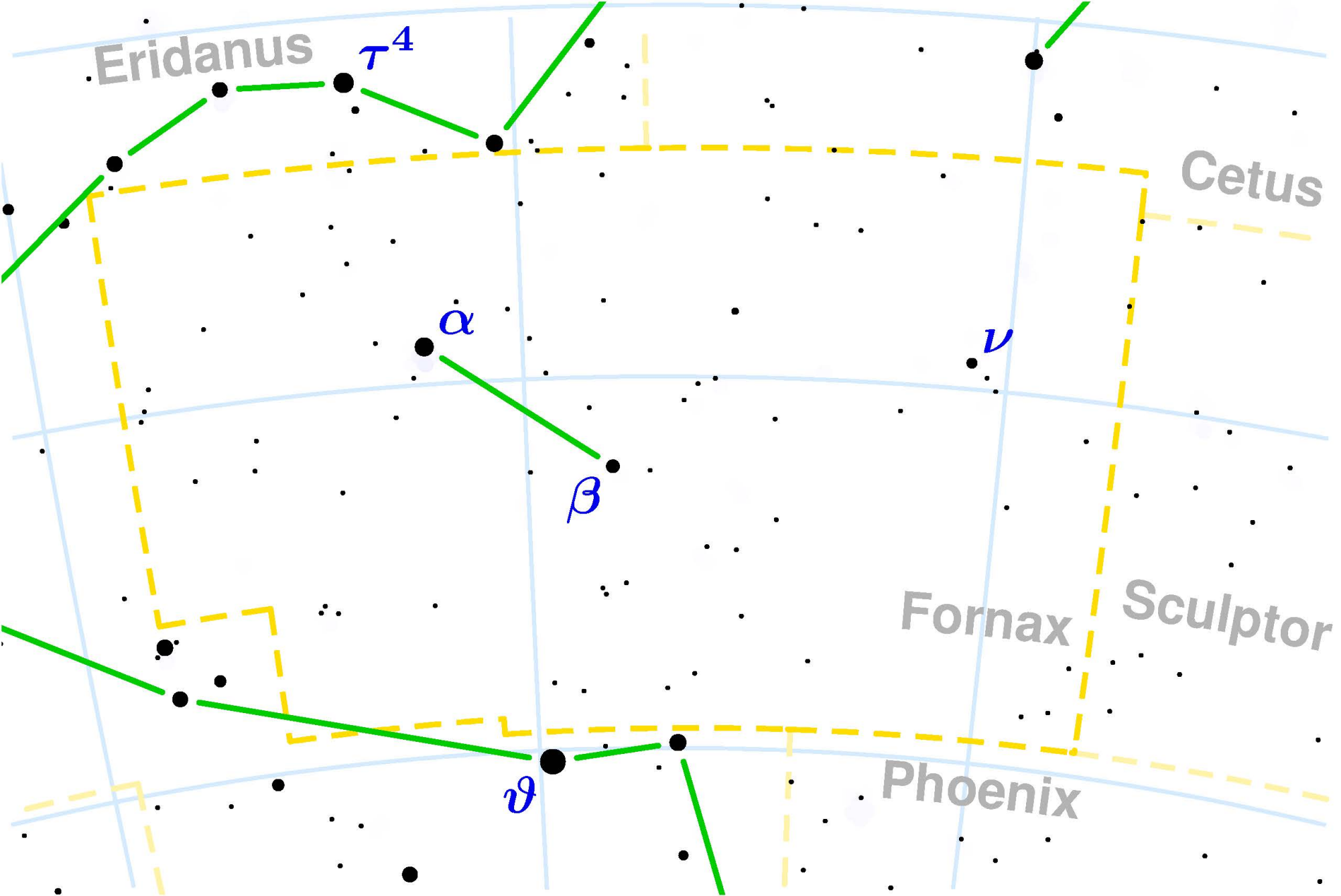

Virgo
Leo
Sex
Crv
Crater
Hydra
δ
γ
ν
α
γ
ε
β

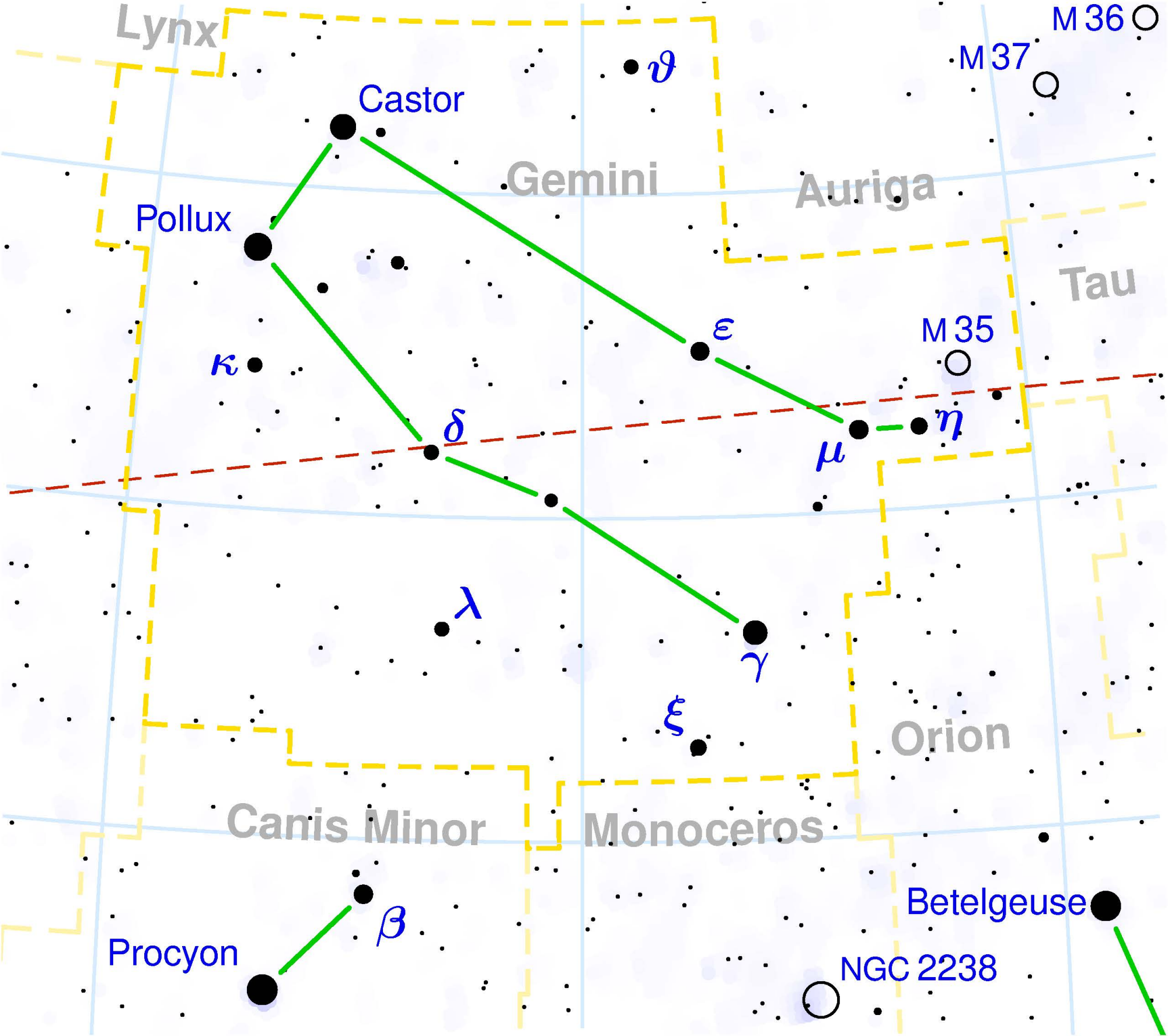

Cepheus
Cygnus
Draco
Her
Lyra
Vulpecula
Hercules
M 39
NGC 7000
IC 5070
Deneb
ι^2
δ
γ
ε
η
β
γ
β
Vega
γ
M 57
NGC 6992
NGC 6995
NGC 6960
M 56
M 27

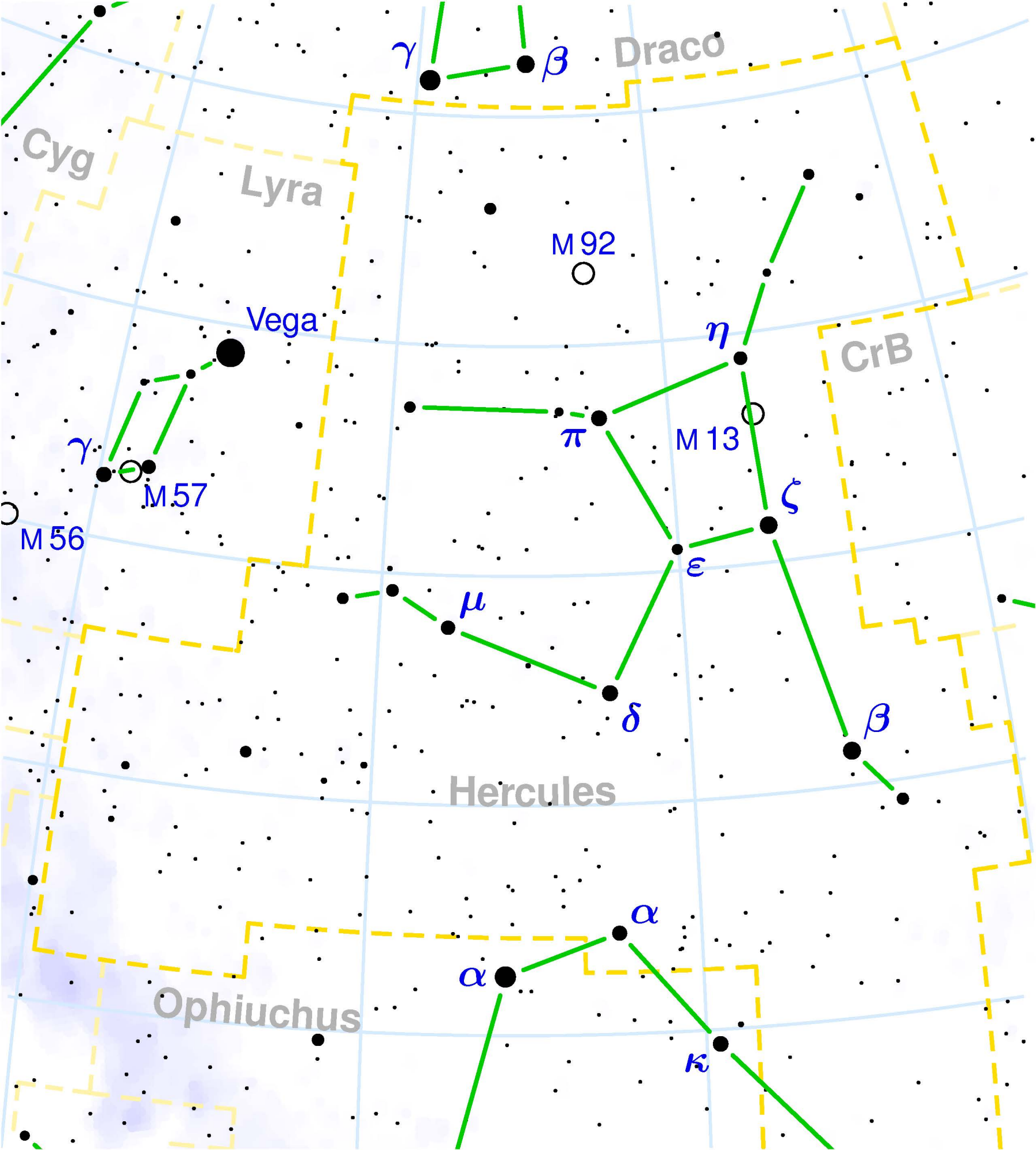

Vulpecula
Delphinus
Sagitta
Aquila
Equ
NGC 7006
γ
α
δ
β
ε
NGC 6891
γ
δ
M 71
Atair
β
NGC 6934

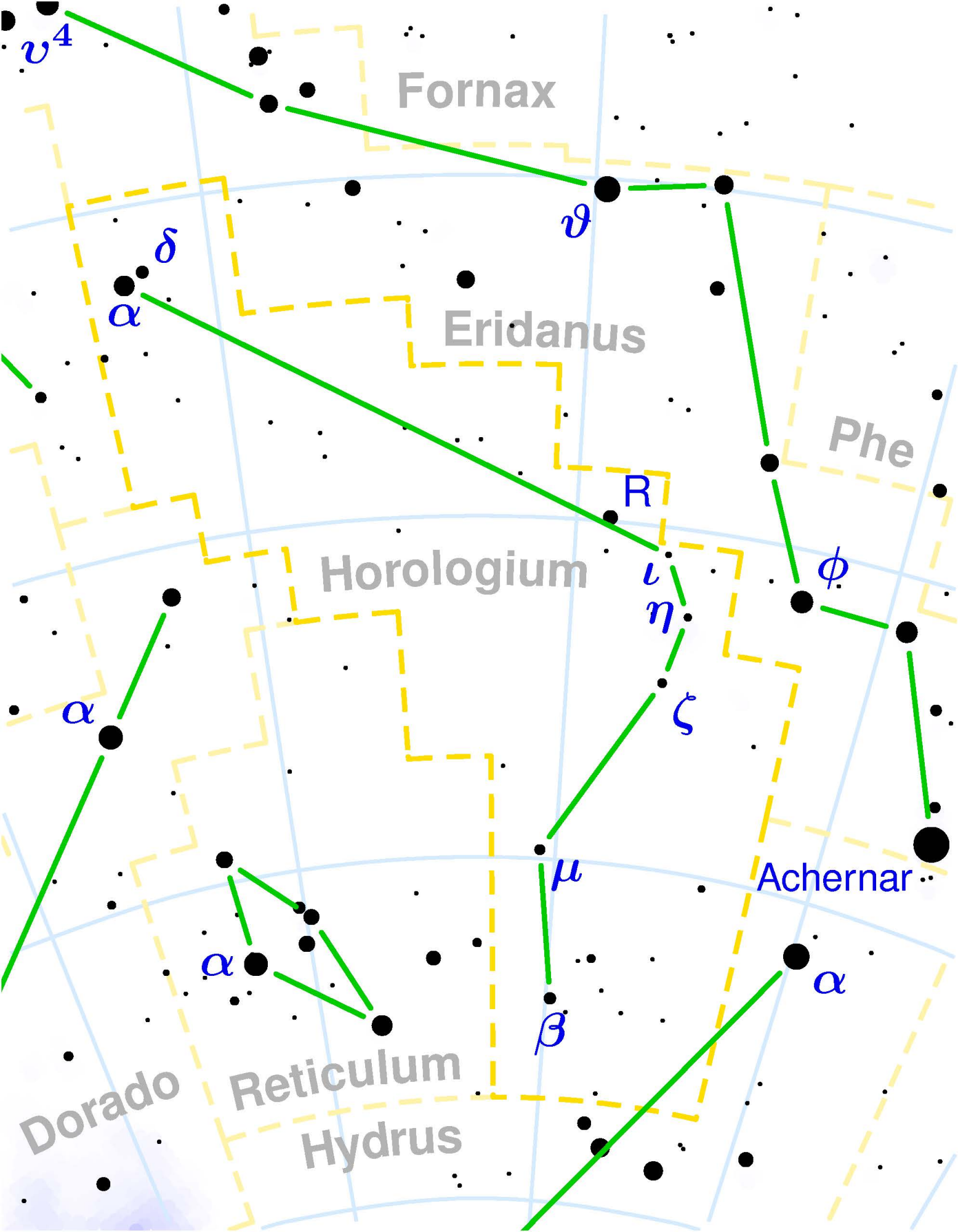

Polaris
Cepheus
Camelopardalis
M 81
M 82
UMa
λ
κ
γ
β
ε
χ
δ
β
γ
Ursa Minor
α
Ursa Major
NGC 6543
ζ
Draco
η
ι
ξ
ν
γ
β
ϑ
M 102
M 101
Boötes
Lyra
Hercules

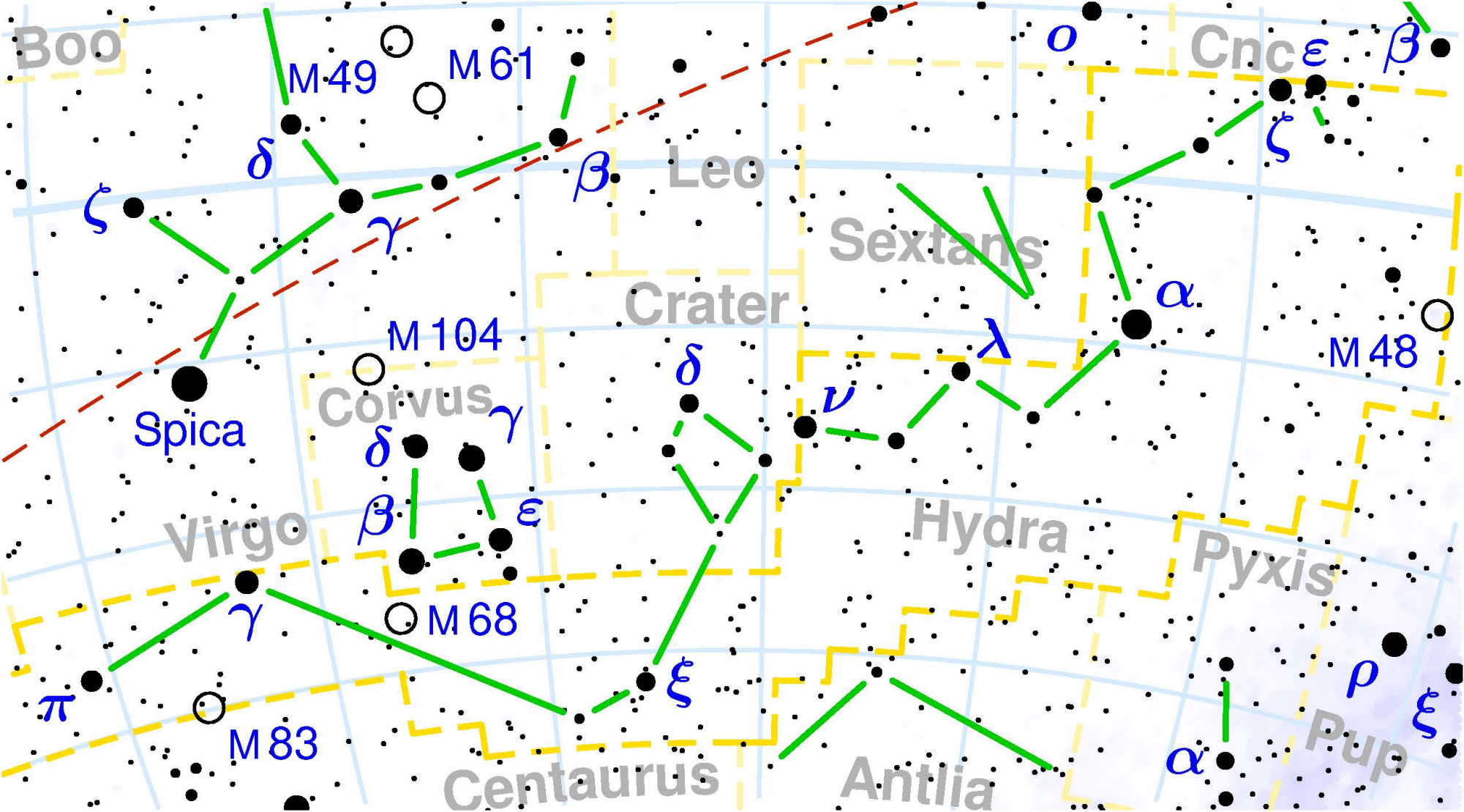

9
NGC 7006
γ
α
δ
β
Pegasus
M15
Equuleus
δ
γ
ε
Delphinus
NGC 6934
α
ε
Aquarius
M2
71

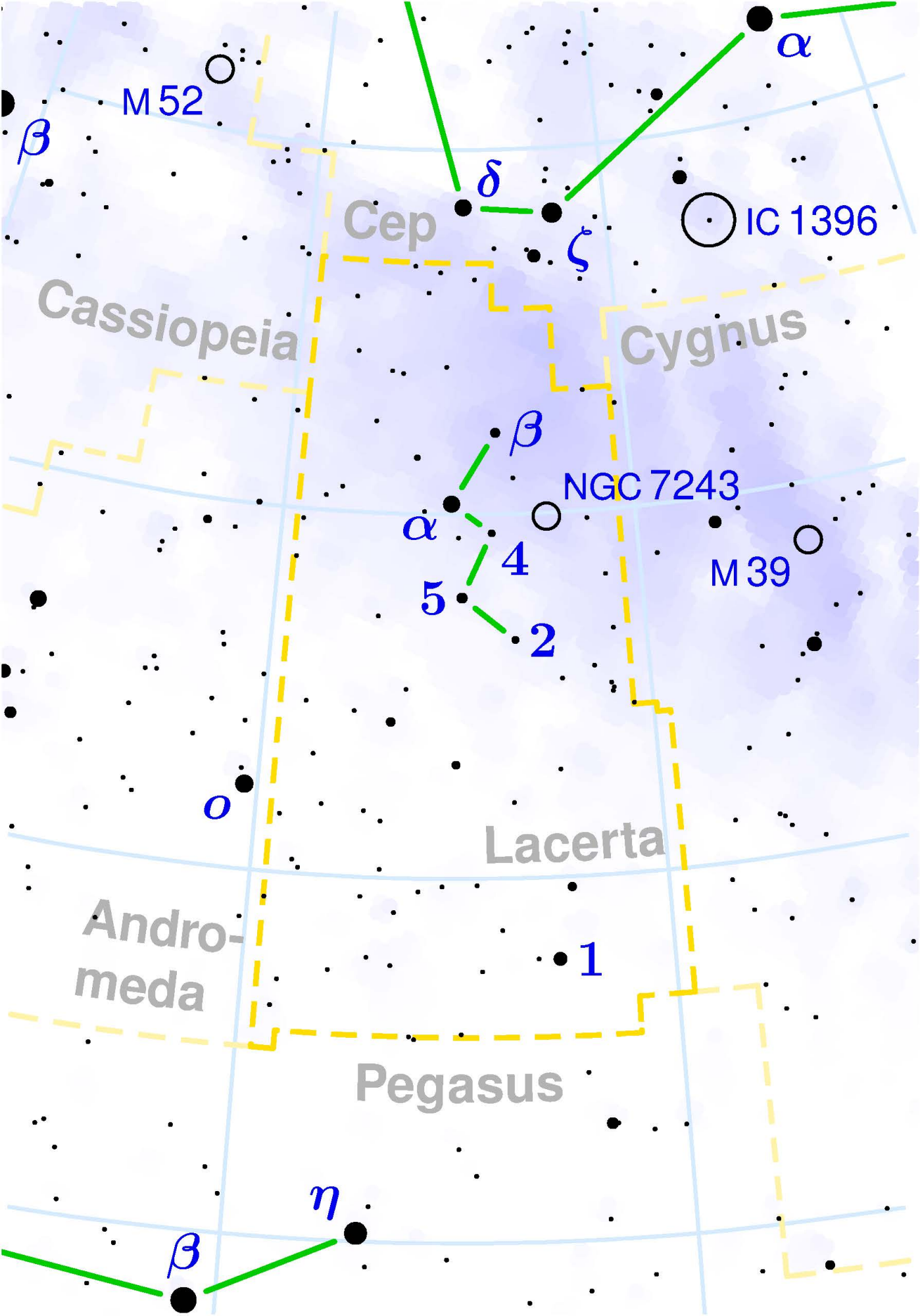

Eridanus
τ^4
Cetus
α
ν
β
Fornax
Sculptor
ϑ
Phoenix

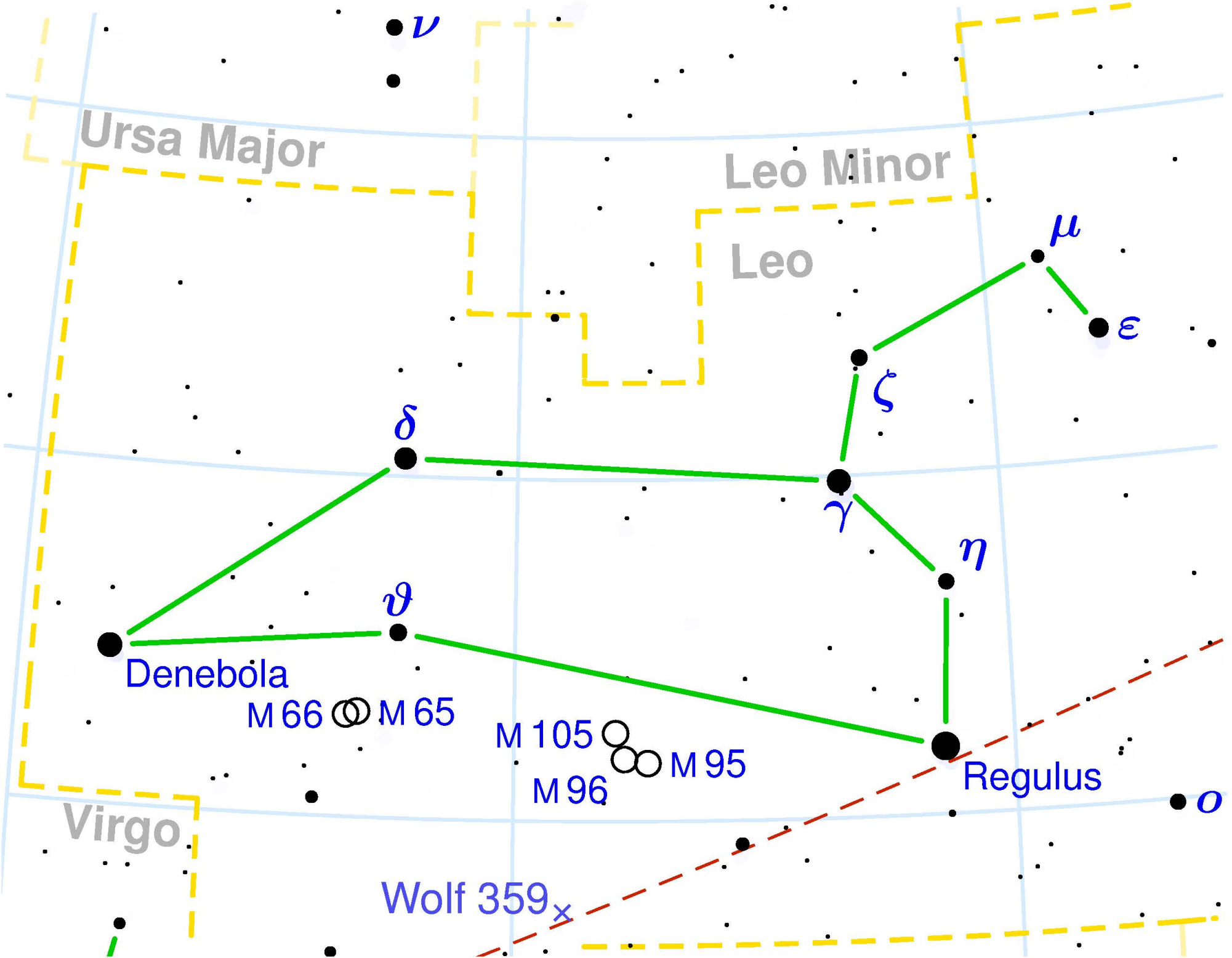

Lynx
M 36
M 37
ϑ
Castor
Gemini
Auriga
Pollux
Tau
ε
M 35
κ
δ
η
μ
λ
γ
ξ
Orion
Canis Minor
Monoceros
β
Procyon
Betelgeuse
NGC 2238

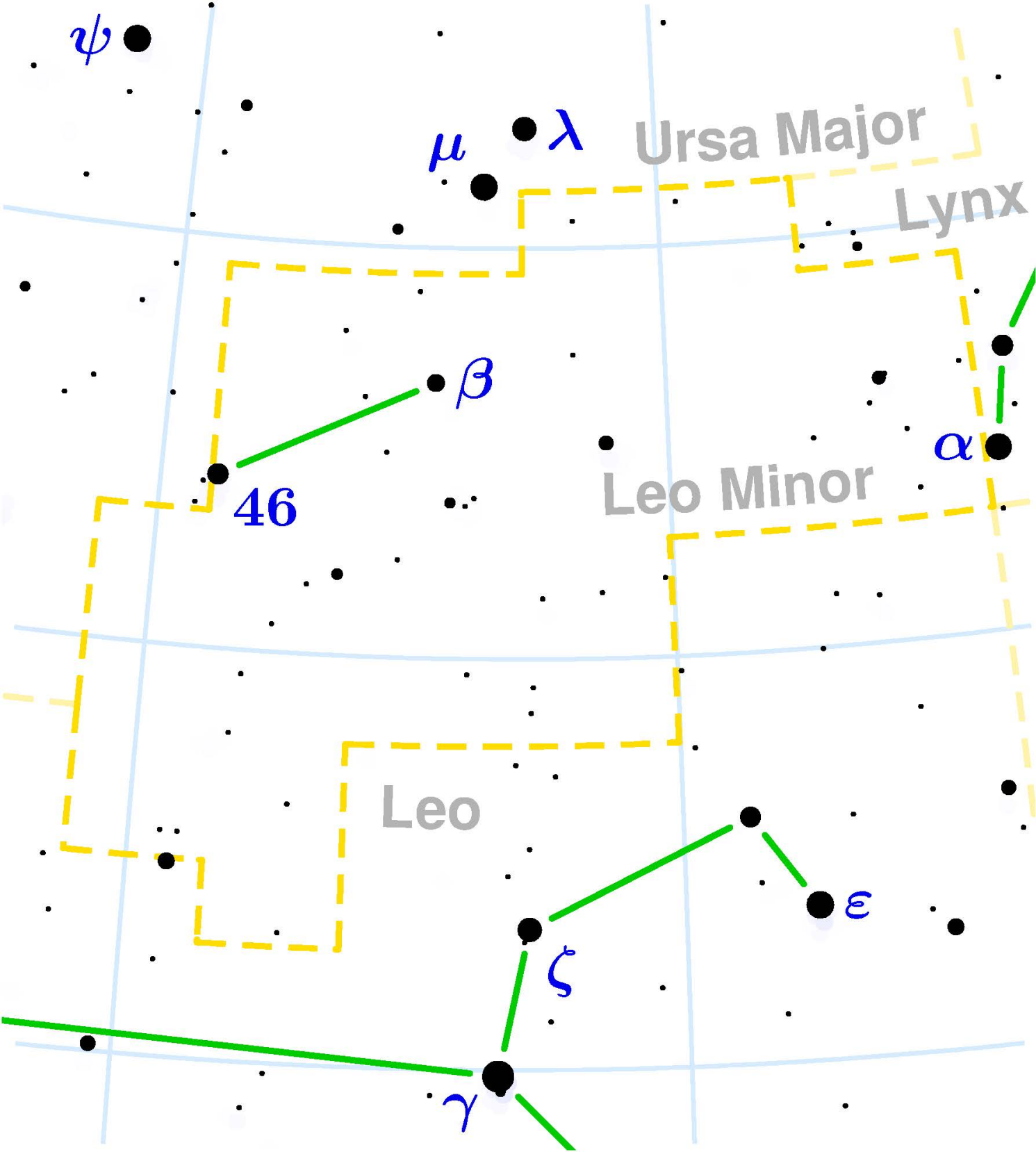

γ
β
Draco
Cyg
Lyra
M92
Vega
η
CrB
γ
π
M13
M57
ζ
M56
ε
μ
δ
β
Hercules
α
α
Ophiuchus
κ

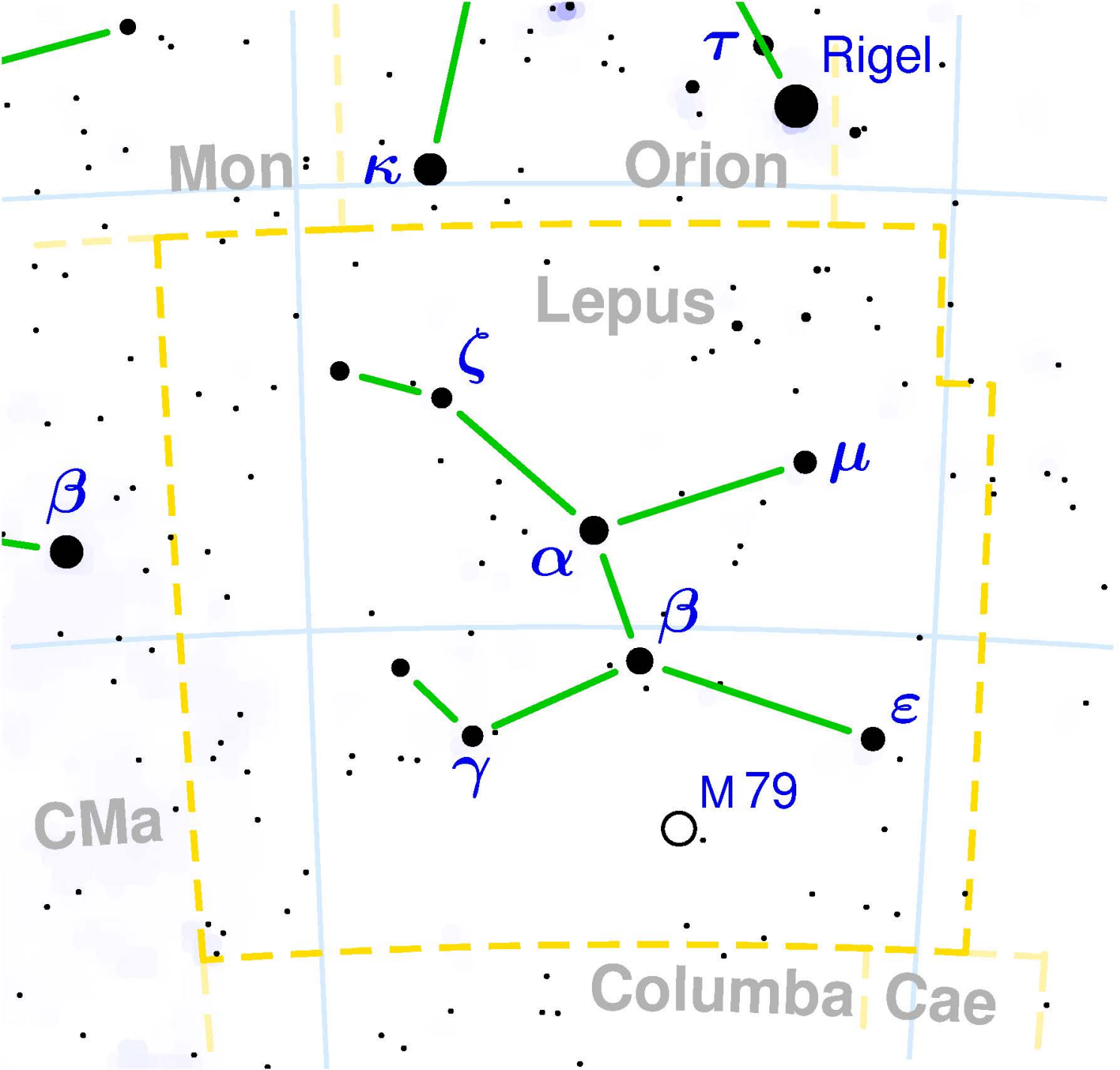

υ^4
Fornax
ϑ
δ
α
Eridanus
Phe
R
Horologium
ι
η
ϕ
α
ζ
μ
Achernar
α
α
β
Dorado
Reticulum
Hydrus

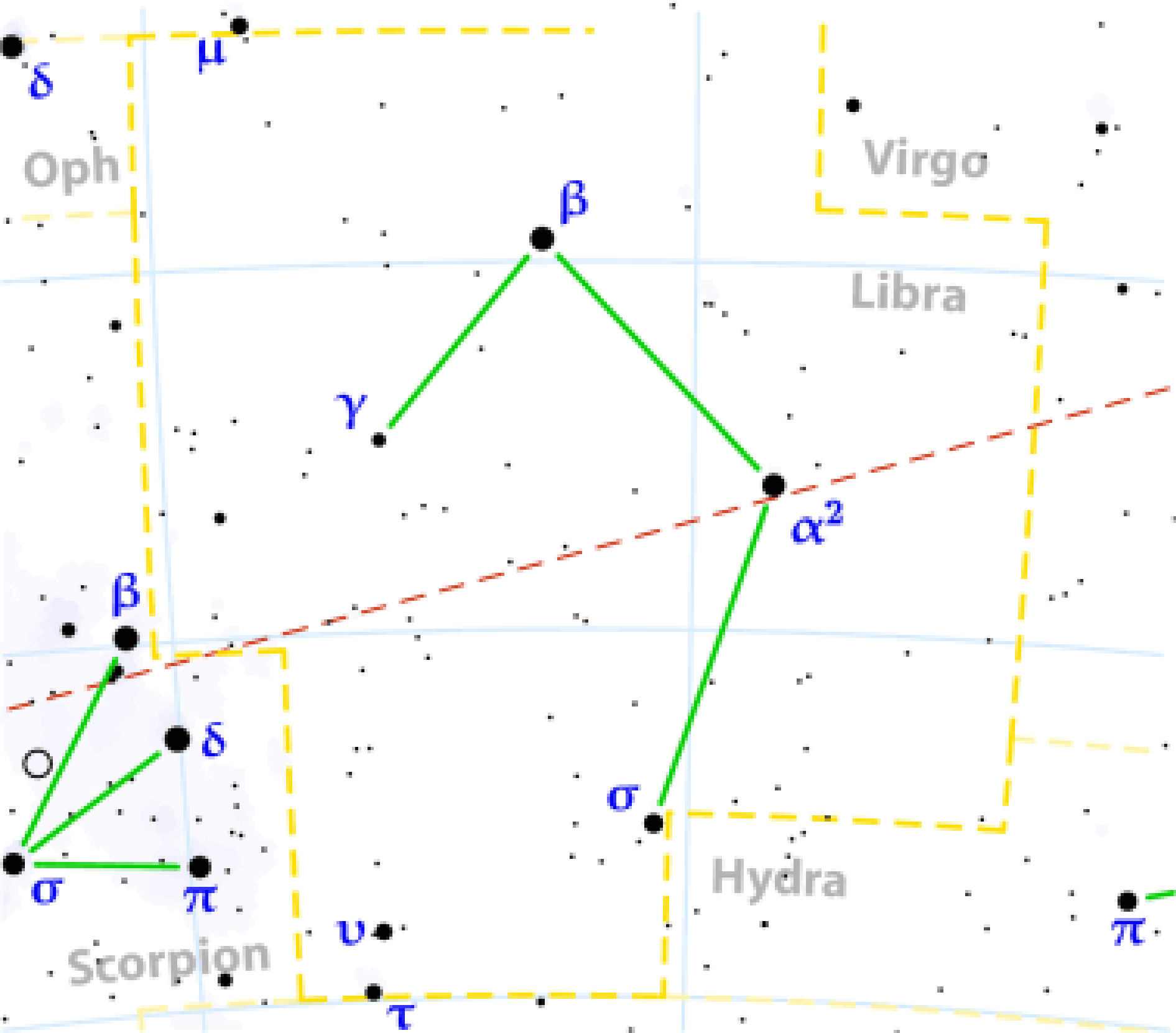

Boo
M49
M61
δ
ζ
γ
β
Leo
Sextans
Crater
M104
Spica
Corvus
δ
γ
β
ε
Virgo
γ
M68
π
M83
Centaurus
ξ
δ
ν
λ
α
M48
Hydra
Pyxis
o
Cnc
ε
β
ζ
ρ
ξ
Pup
α
Antlia

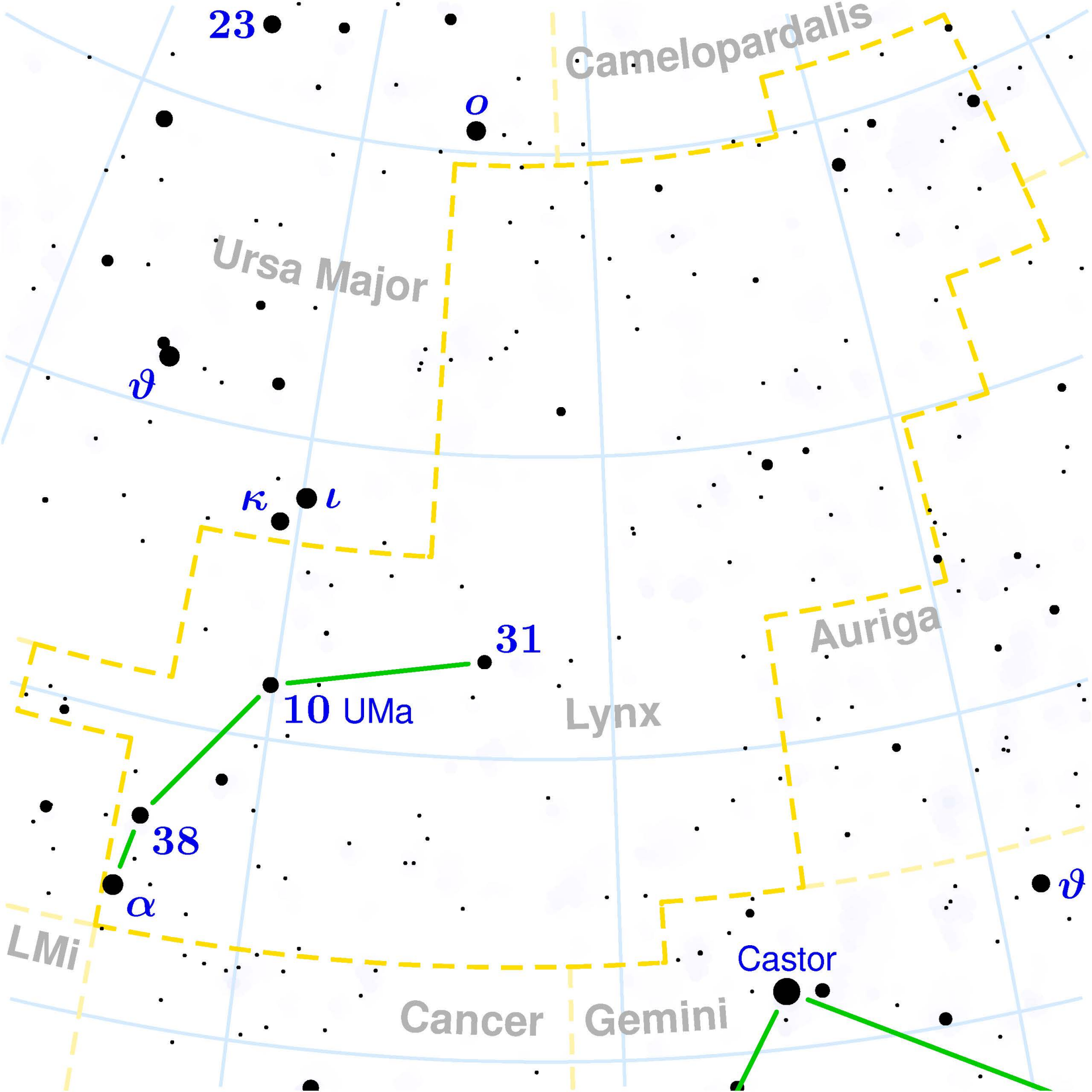

α
M 52
β
δ
Cep
IC 1396
ζ
Cassiopeia
Cygnus
β
NGC 7243
α
4
M 39
5
2
ο
Lacerta
Andro-
meda
1
Pegasus
η
β

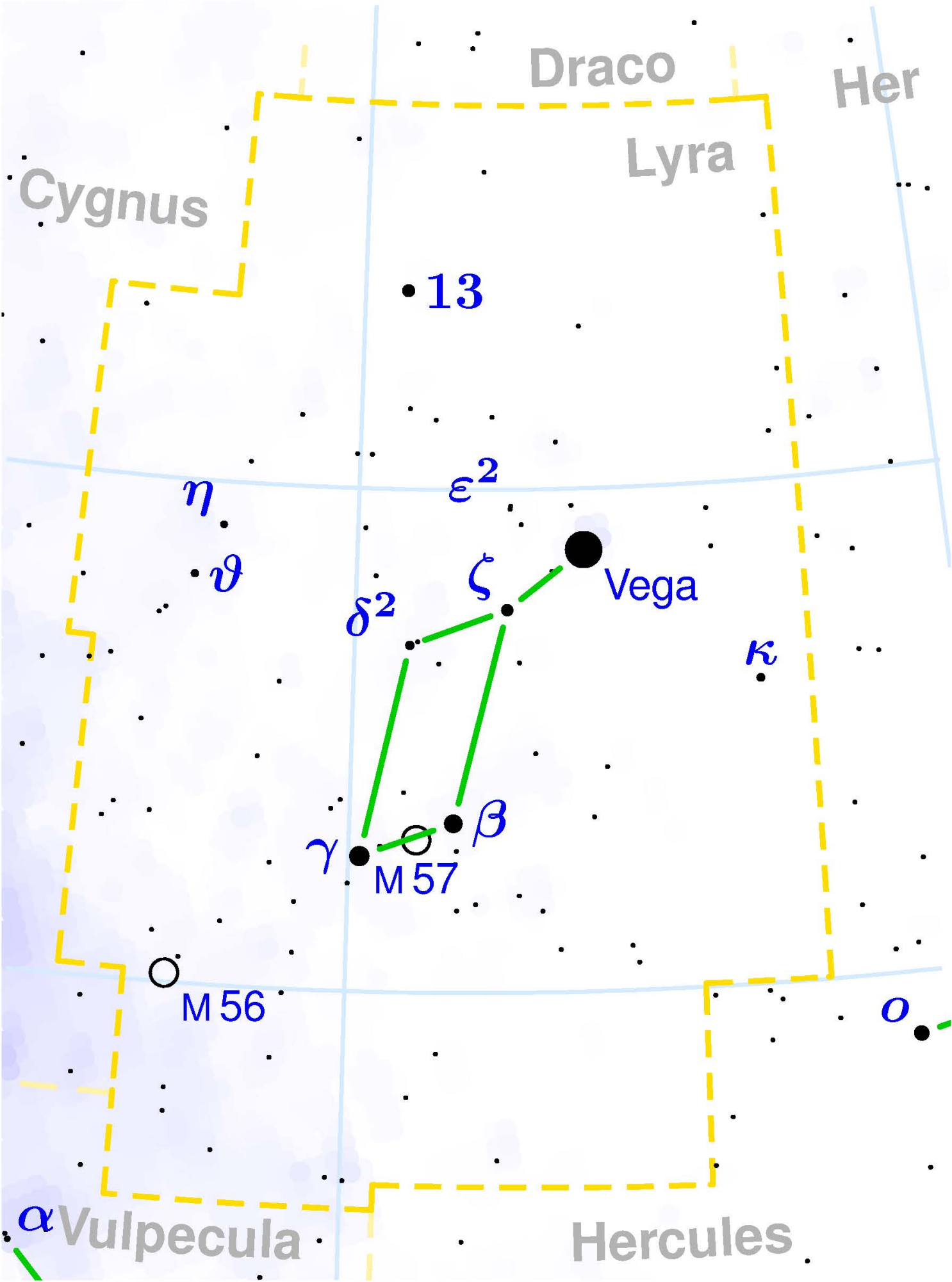

ν
Ursa Major
Leo Minor
Leo
μ
ε
ζ
δ
γ
η
ϑ
Denebola
M 66
M 65
M 105
M 95
M 96
Regulus
o
Virgo
Wolf 359

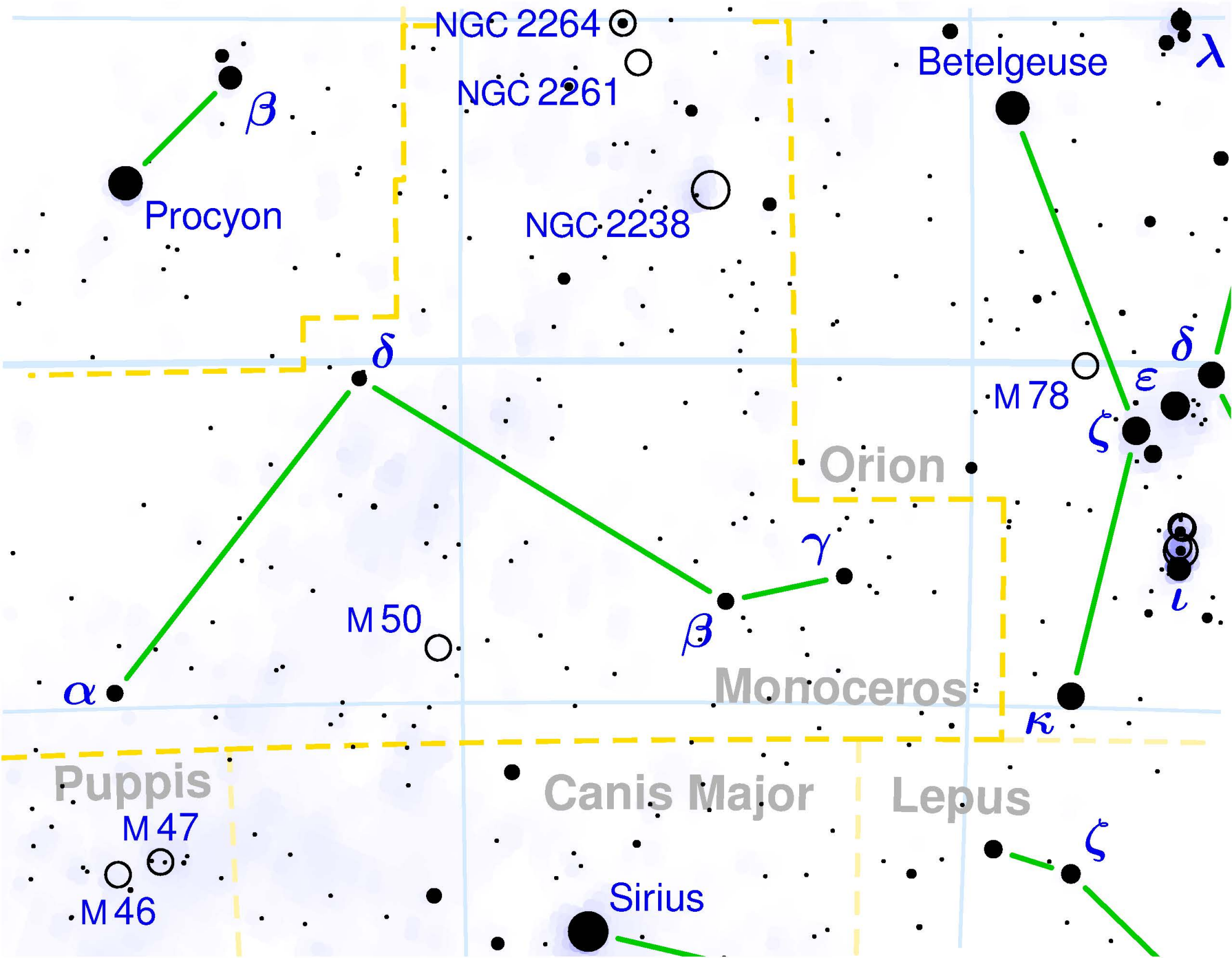

ψ
μ
λ
Ursa Major
Lynx
β
α
46
Leo Minor
Leo
ε
ζ
γ

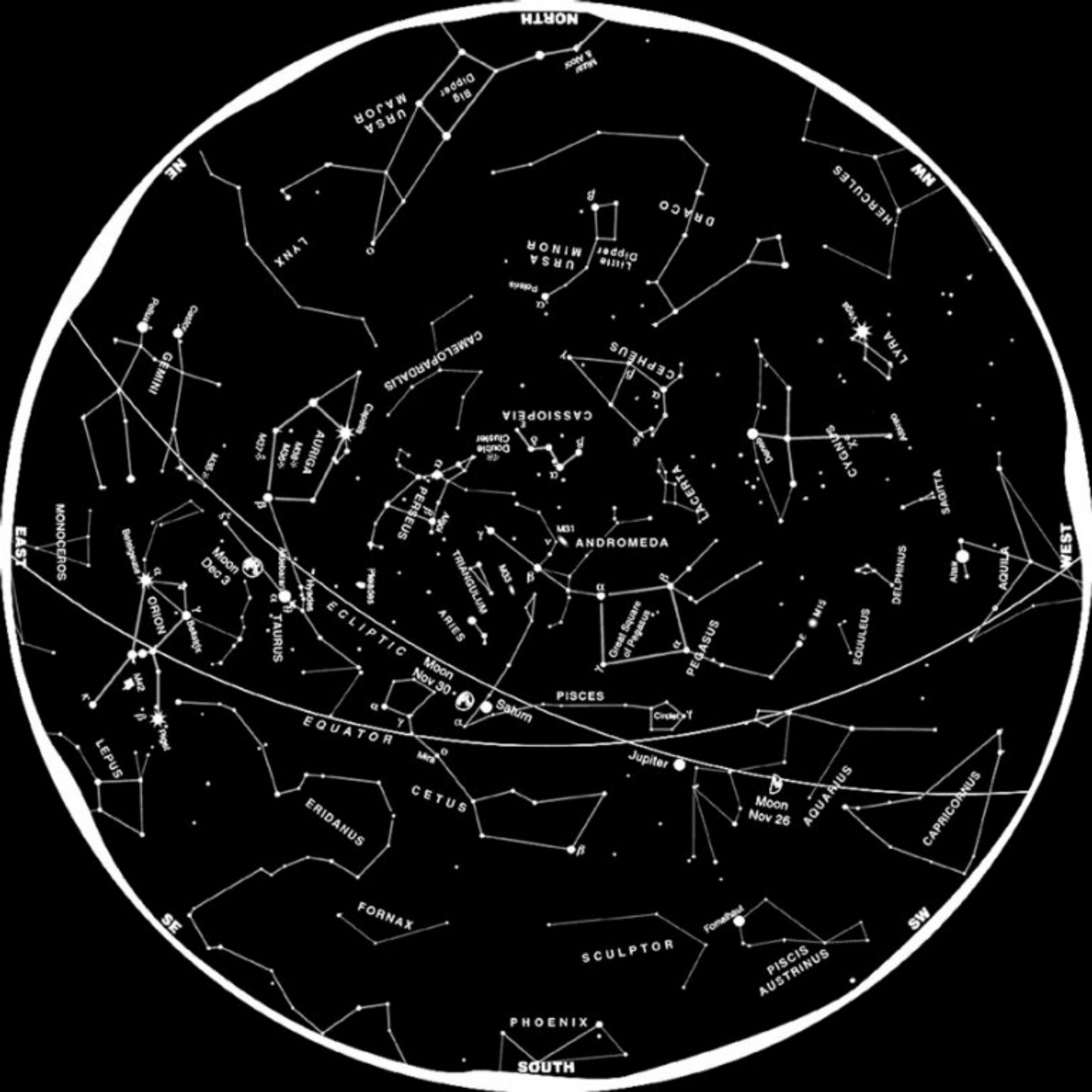

τ
Rigel
Mon
κ
Orion
Lepus
ζ
μ
β
α
β
ε
γ
M 79
CMa
Columba
Cae


δ
μ
Oph
Virgo
β
Libra
γ
α²
β
δ
σ
σ
π
Hydra
π
υ
Scorpion
τ

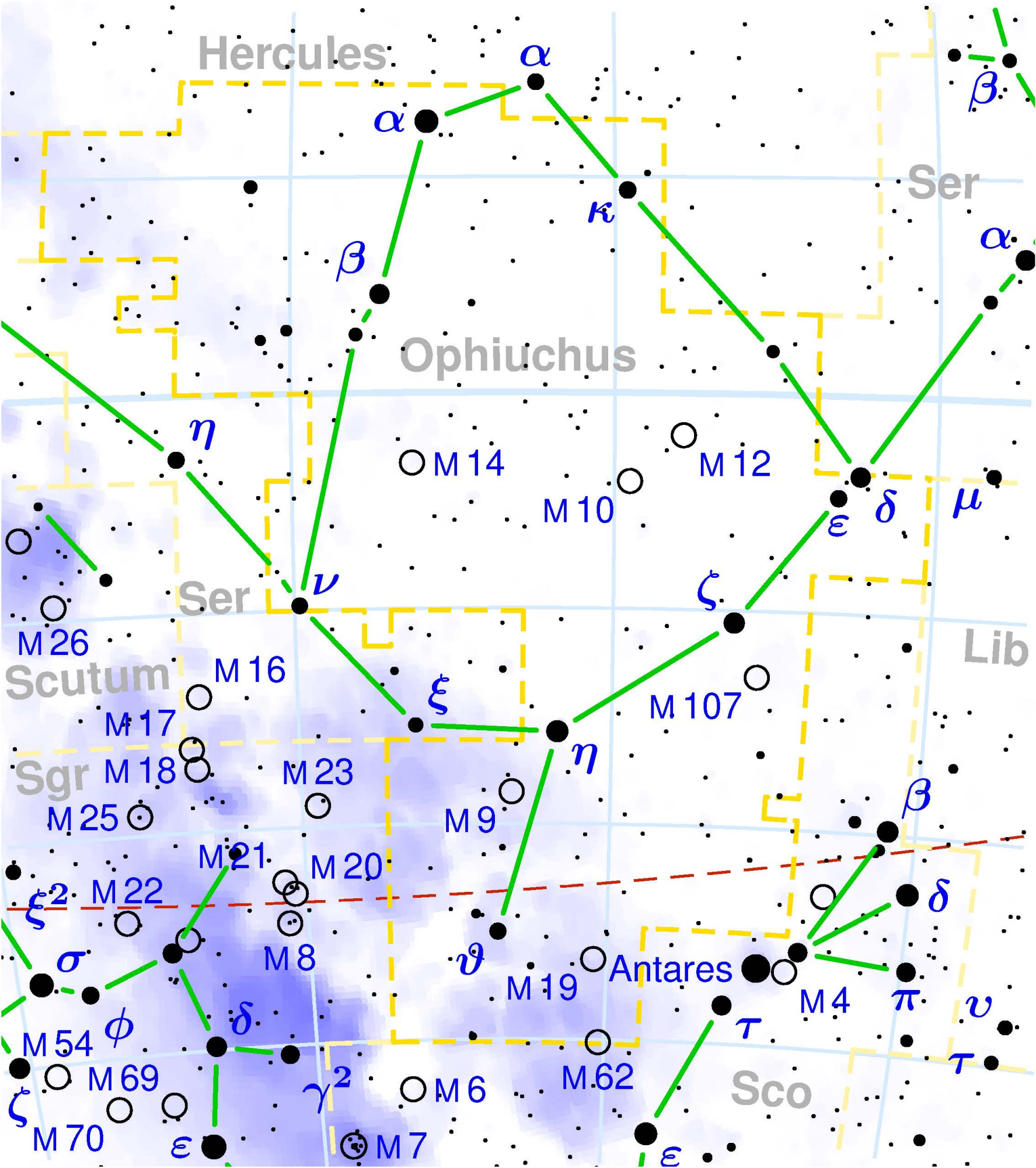

23
Camelopardalis
o
Ursa Major
ϑ
κ
ι
31
Auriga
10 UMa
Lynx
38
α
ϑ
LMi
Castor
Cancer
Gemini

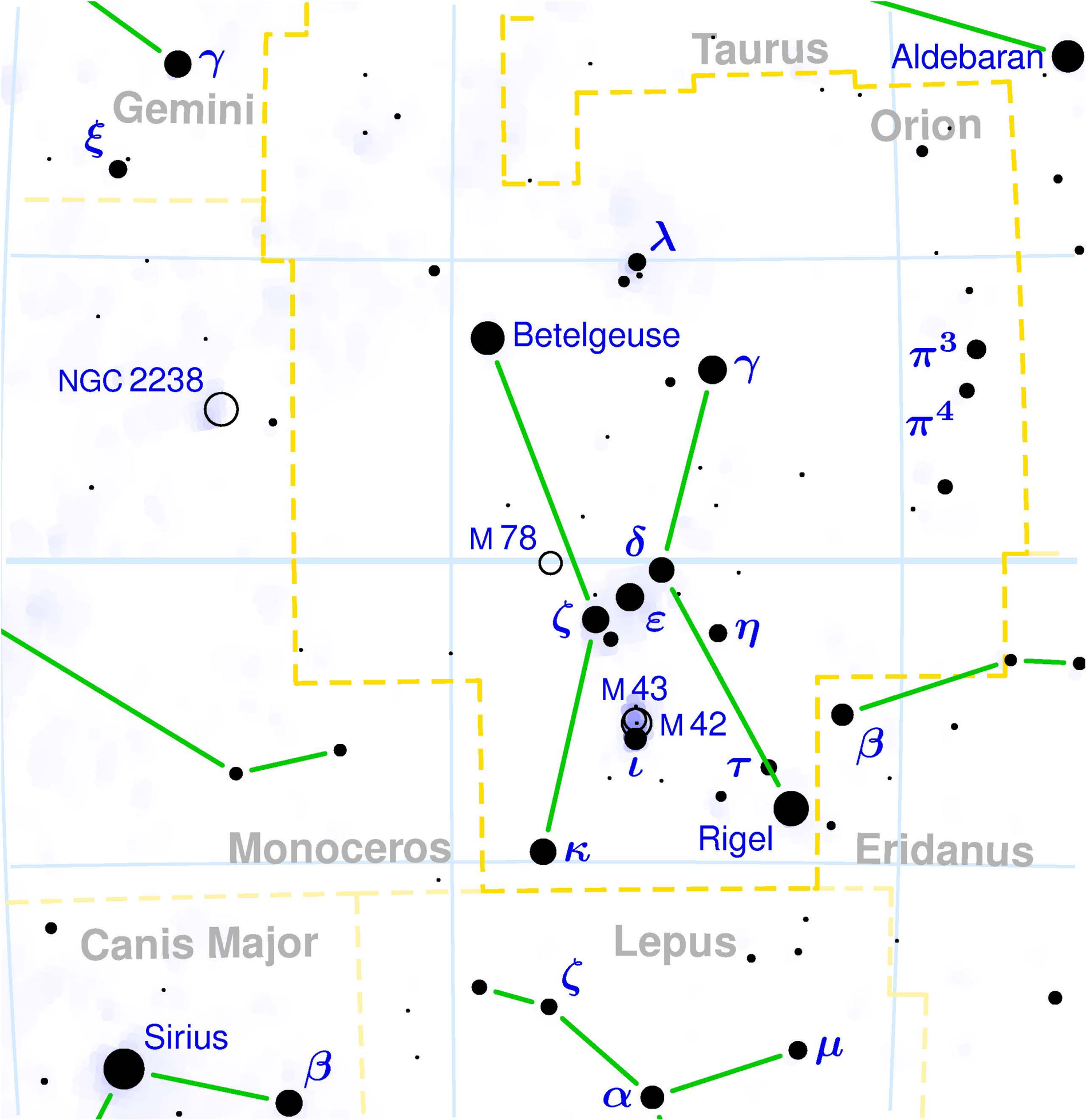

Draco
Her
Lyra
Cygnus
13
η
ε²
ϑ
ζ
Vega
δ²
κ
β
γ
M 57
M 56
ο
α
Vulpecula
Hercules

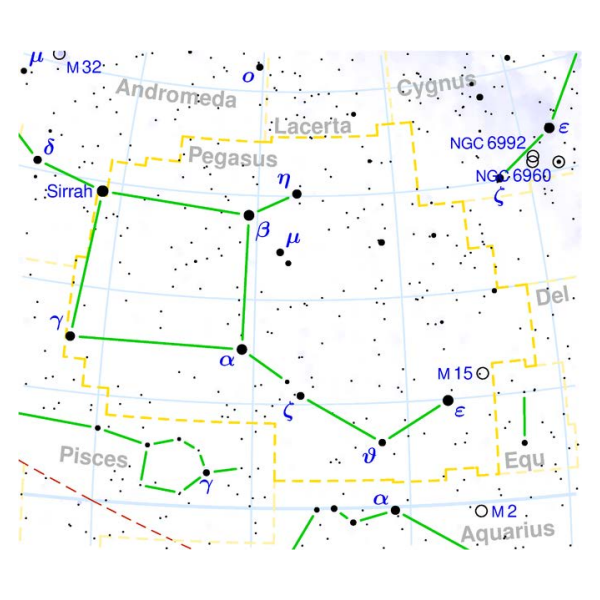

NGC 2264
NGC 2261
Betelgeuse
λ
β
Procyon
NGC 2238
δ
δ
ε
M 78
ζ
Orion
γ
ι
M 50
β
α
Monoceros
κ
Puppis
Canis Major
Lepus
M 47
M 46
Sirius
ζ

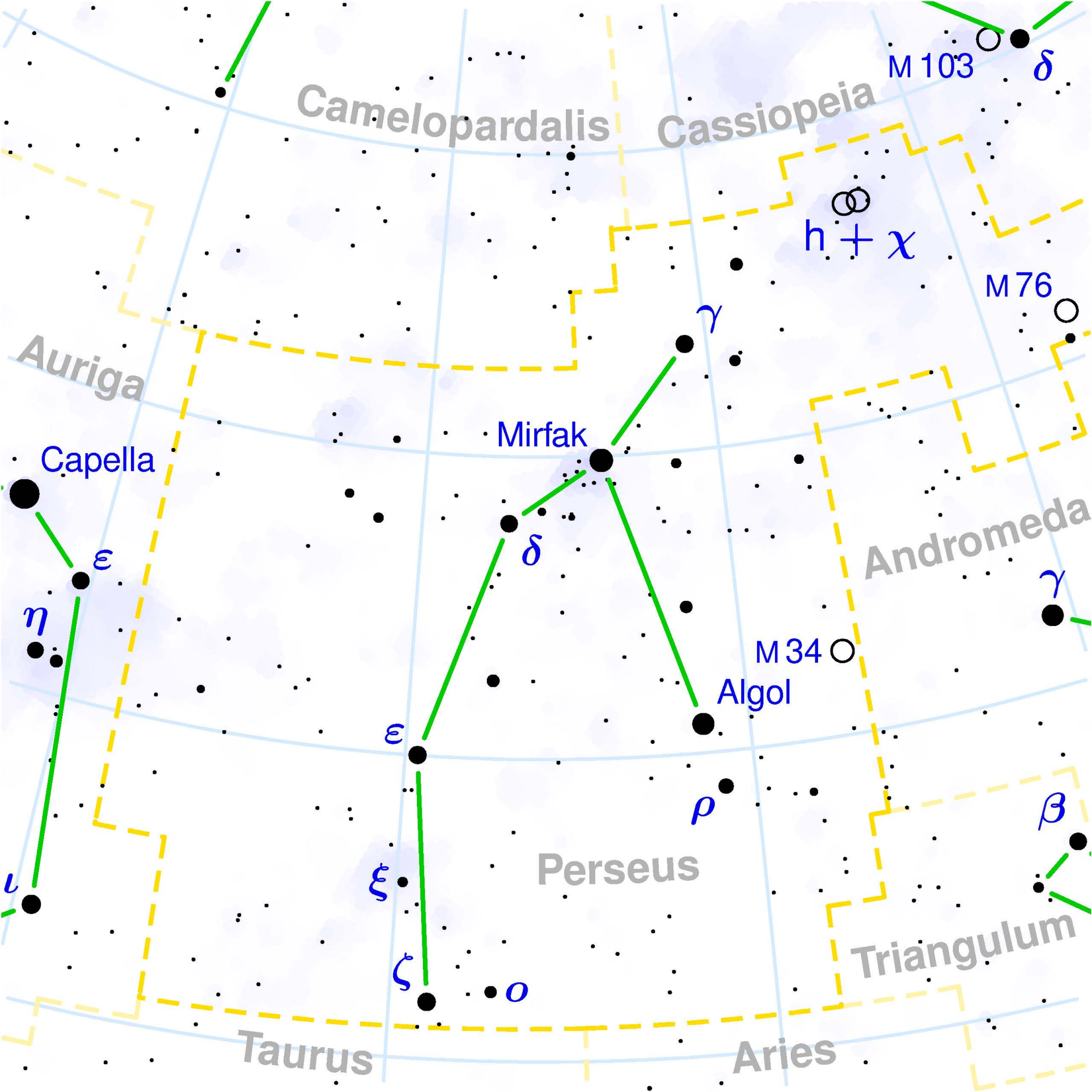

NORTH
NE
NW
EAST
WEST
SE
SW
SOUTH
Big Dipper
URSA MAJOR
Little Dipper
URSA MINOR
Polaris
Mizar & Alcor
LYNX
DRACO
HERCULES
LYRA
Vega
CEPHEUS
CAMELOPARDALIS
CASSIOPEIA
Double Cluster
Capella
Pleiades
AURIGA
GEMINI
Castor
Pollux
PERSEUS
Algol
ANDROMEDA
M31
M32
M33
TRIANGULUM
ARIES
LACERTA
CYGNUS
Deneb
SAGITTA
AQUILA
Altair
DELPHINUS
EQUULEUS
M15
Great Square of Pegasus
PEGASUS
MONOCEROS
Betelgeuse
ORION
Rigel
Bellatrix
Meissa
Aldebaran
Hyades
TAURUS
Moon Dec 3
ECLIPTIC
Moon Nov 30
Saturn
PISCES
Circlet
EQUATOR
LEPUS
M42
M78
CETUS
ERIDANUS
Jupiter
Moon Nov 26
AQUARIUS
CAPRICORNUS
FORNAX
SCULPTOR
Fomalhaut
PISCIS AUSTRINUS
PHOENIX

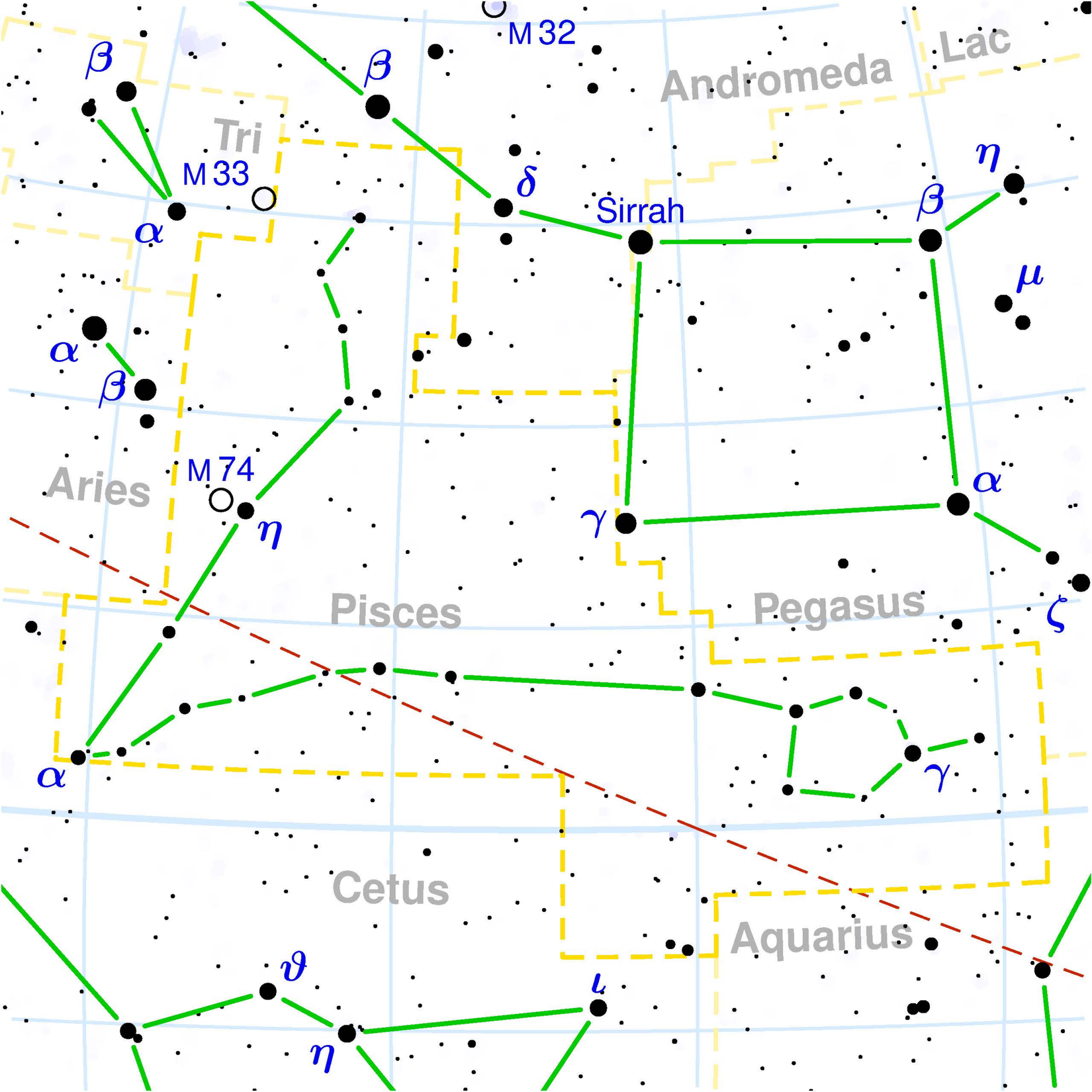
NORTH
NE
NW
EAST
WEST
SE
SW
SOUTH
CASSIOPEIA
CAMELOPARDALIS
AURIGA
LACERTA
CEPHEUS
LYNX
GEMINI
Pollux
Castor
URSA MINOR
Polaris
Little Dipper
DRACO
Thuban
URSA MAJOR
Big Dipper
Mizar
Alkaid
M51
CANES VENATICI
LEO MINOR
CANCER
Sickle
Regulus
LEO
Denebola
COMA BERENICES
CYGNUS
Deneb
DELPHINUS
SAGITTA
Vega
LYRA
Albireo
M57
M92
HERCULES
M13
CORONA BOREALIS
BOÖTES
Arcturus
AQUILA
Altair
SERPENS (CAUDA)
SERPENS (CAPUT)
M11
SCUTUM
OPHIUCHUS
M5
VIRGO
Spica
ECLIPTIC
EQUATOR
CORVUS
CRATER
HYDRA
LIBRA
SAGITTARIUS
M8
M4
Antares
SCORPIUS
LUPUS
CENTAURUS

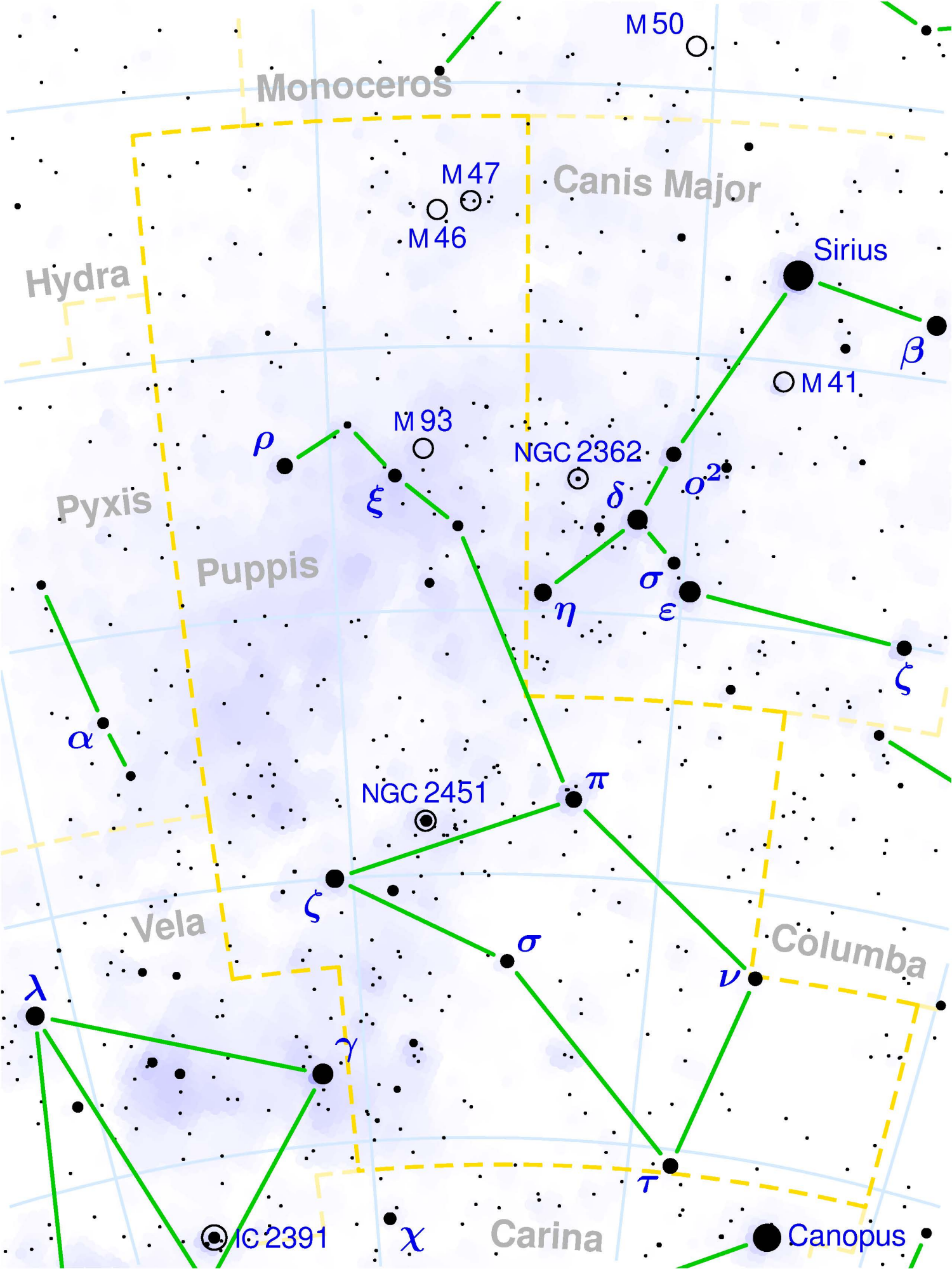

Hercules
α
α
β
κ
β
Ser
α
Ophiuchus
η
M14
M12
M10
ε
δ
μ
Ser
ν
ζ
M26
Lib
Scutum
M16
ξ
M107
M17
η
Sgr
M18
M23
M25
M9
β
M21
M20
ξ2
M22
δ
σ
M8
ϑ
M19
Antares
M4
π
υ
M54
ϕ
δ
τ
τ
M69
γ2
M6
M62
Sco
ζ
M70
ε
M7
ε

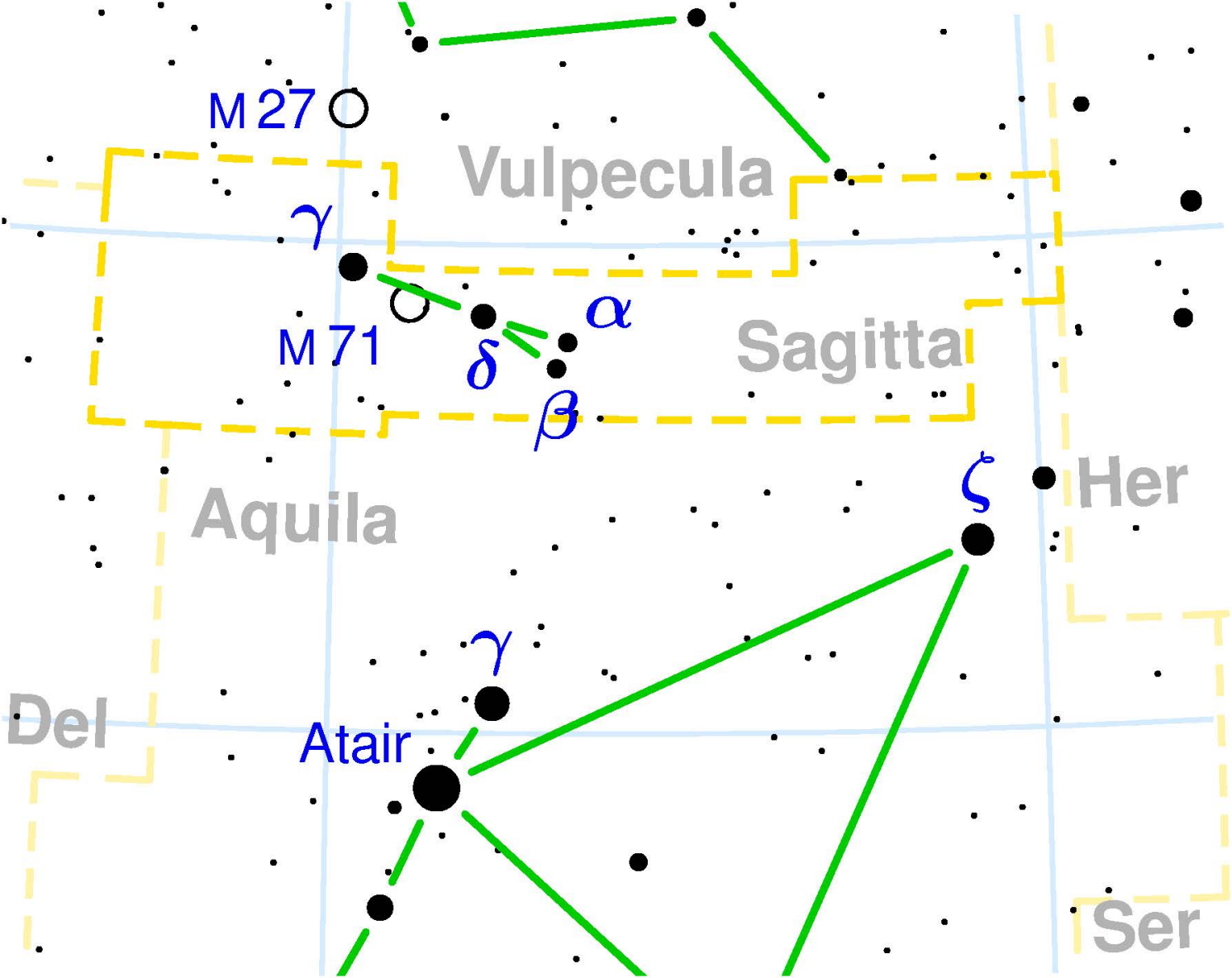

γ
Gemini
ξ
Taurus
Aldebaran
Orion
λ
Betelgeuse
γ
NGC 2238
π3
π4
M 78
δ
ζ
ε
η
M 43
M 42
ι
τ
β
Rigel
κ
Monoceros
Eridanus
Canis Major
Lepus
ζ
Sirius
β
μ
α

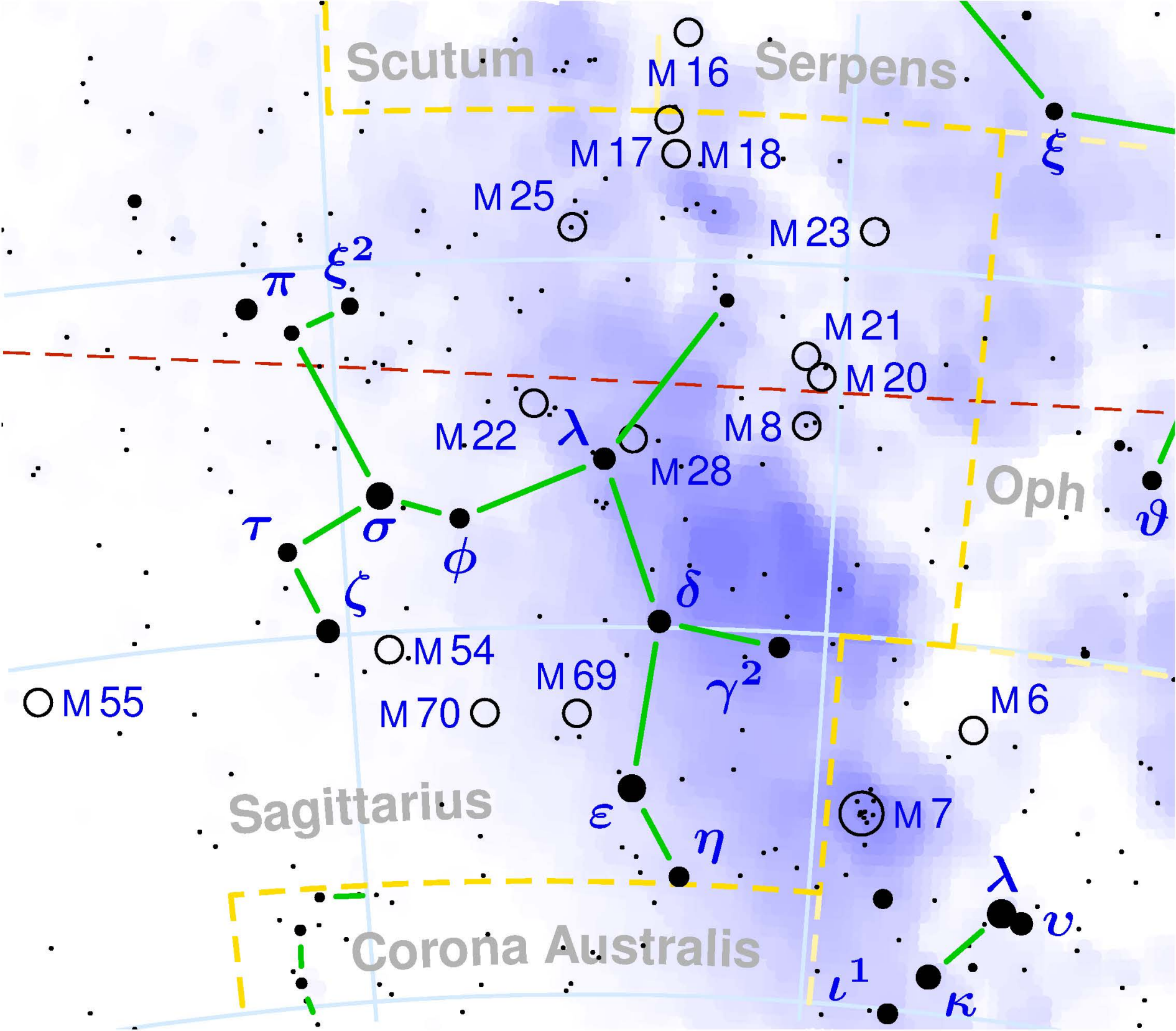

μ
M 32
Andromeda
ο
Cygnus
Lacerta
ε
δ
Pegasus
NGC 6992
NGC 6960
η
Sirrah
ζ
β
μ
Del
γ
α
M 15
ε
ζ
Pisces
ϑ
Equ
γ
α
M 2
Aquarius

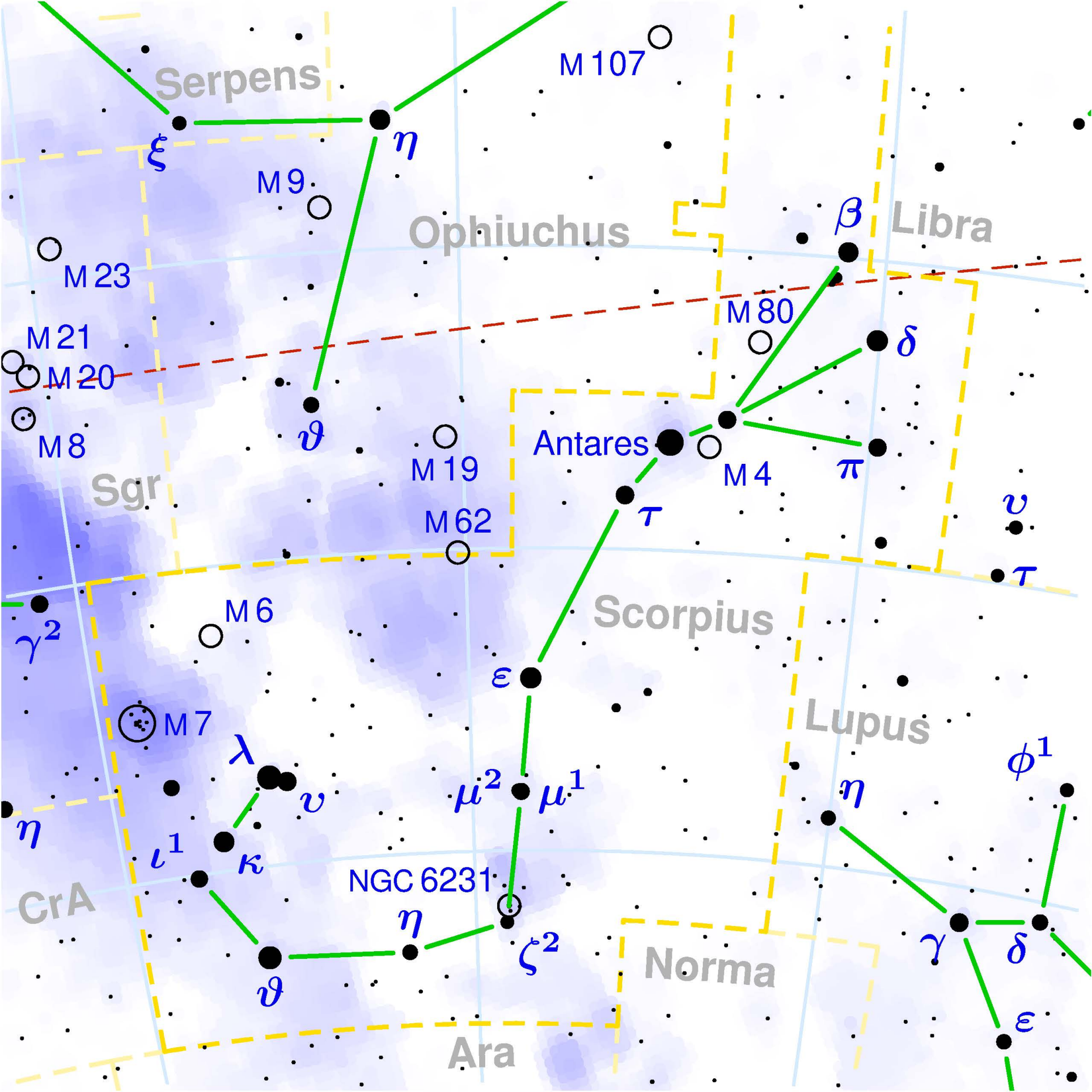

Camelopardalis
Cassiopeia
M 103
δ
h + χ
M 76
γ
Auriga
Mirfak
Capella
ε
δ
η
Andromeda
γ
M 34
Algol
ε
ρ
β
Perseus
ι
ξ
Triangulum
ζ
o
Taurus
Aries

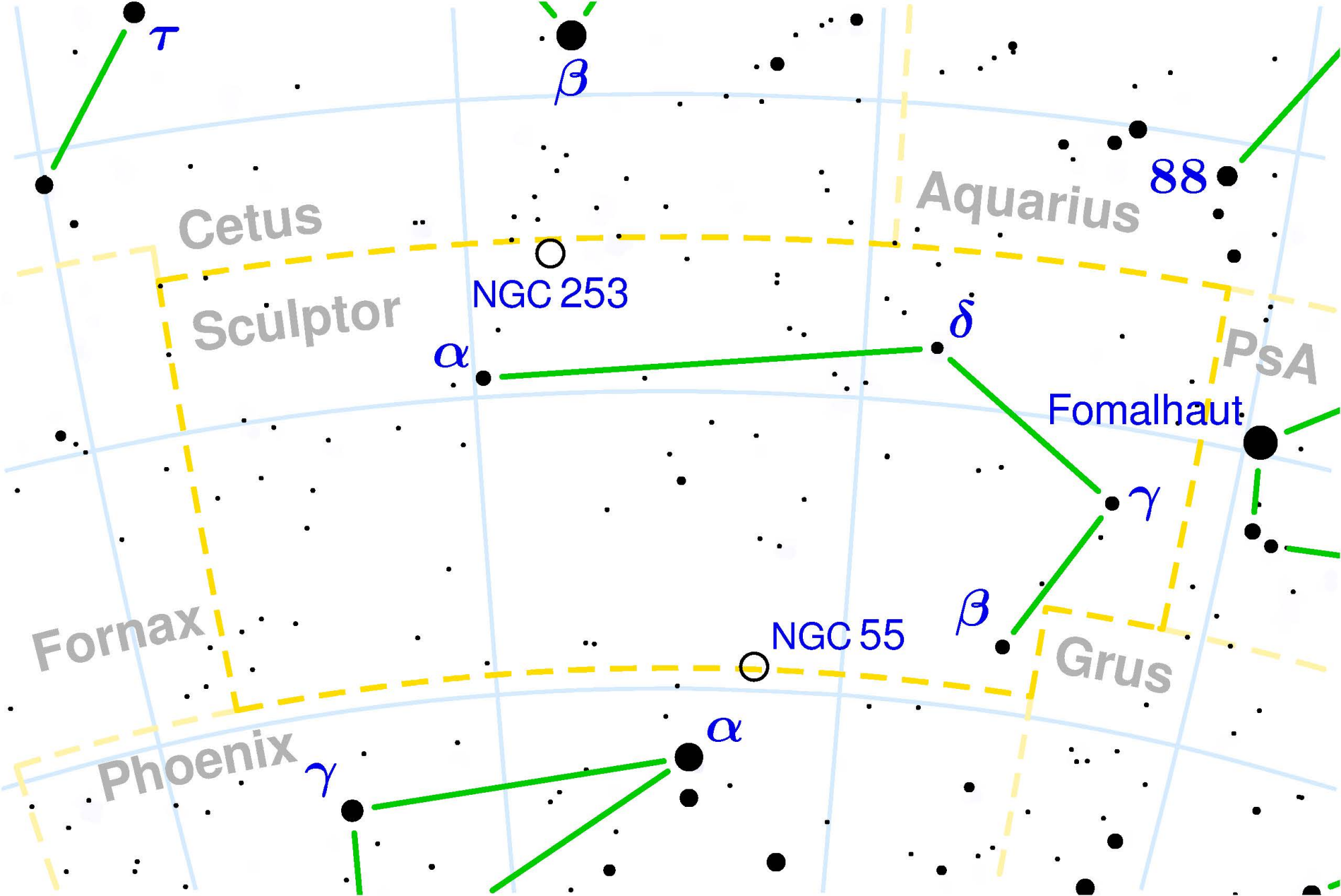

M 32
Andromeda
Lac
β
β
Tri
M 33
δ
Sirrah
η
β
α
μ
α
β
M 74
Aries
η
γ
α
Pisces
Pegasus
ζ
α
γ
Cetus
Aquarius
ϑ
ι
η

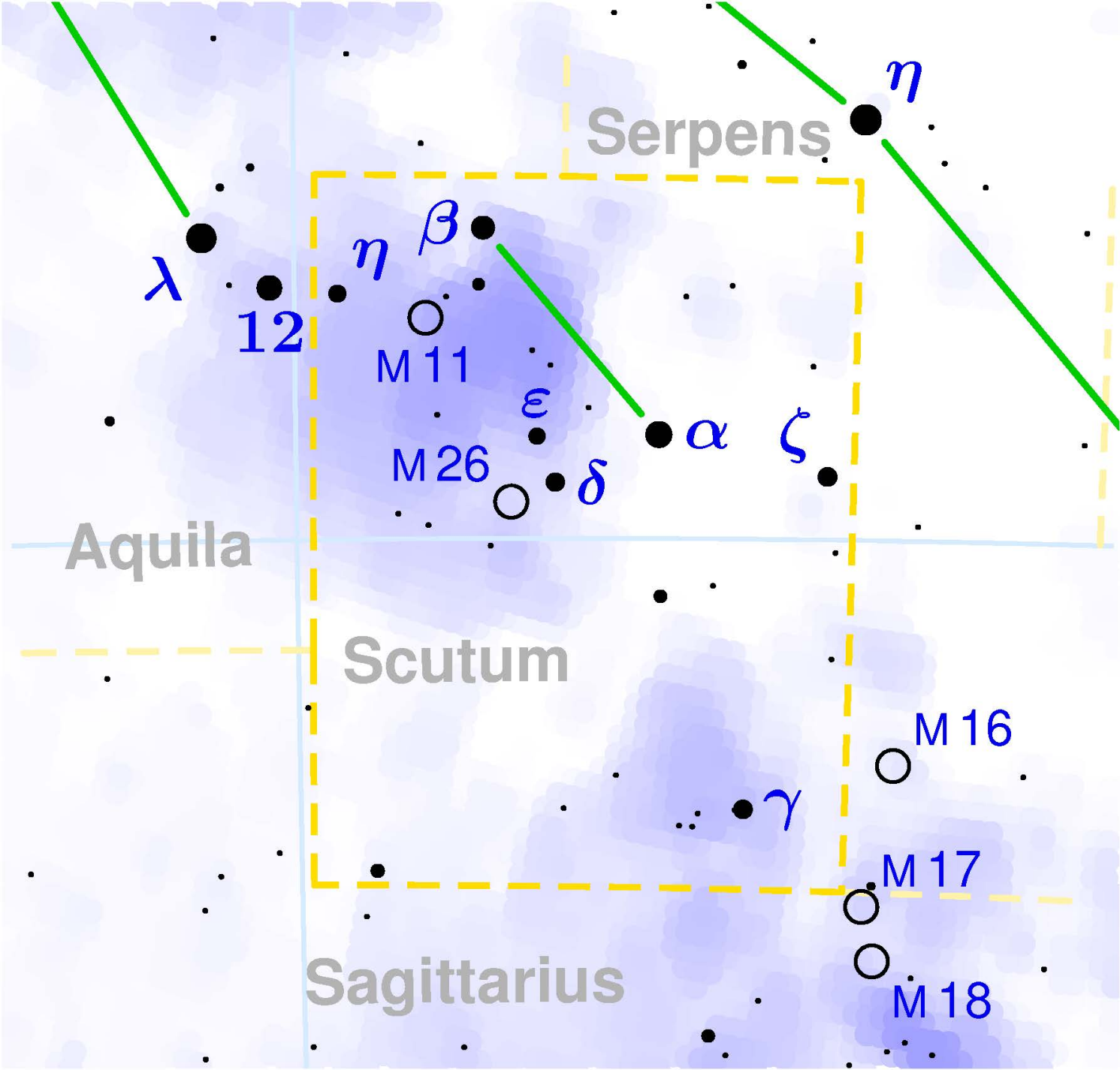

M 50
Monoceros
M 47
M 46
Canis Major
Hydra
Sirius
β
M 41
M 93
ρ
NGC 2362
ξ
δ
o²
Pyxis
Puppis
σ
η
ε
ζ
α
π
NGC 2451
ζ
Vela
σ
Columba
ν
λ
γ
τ
IC 2391
χ
Carina
Canopus

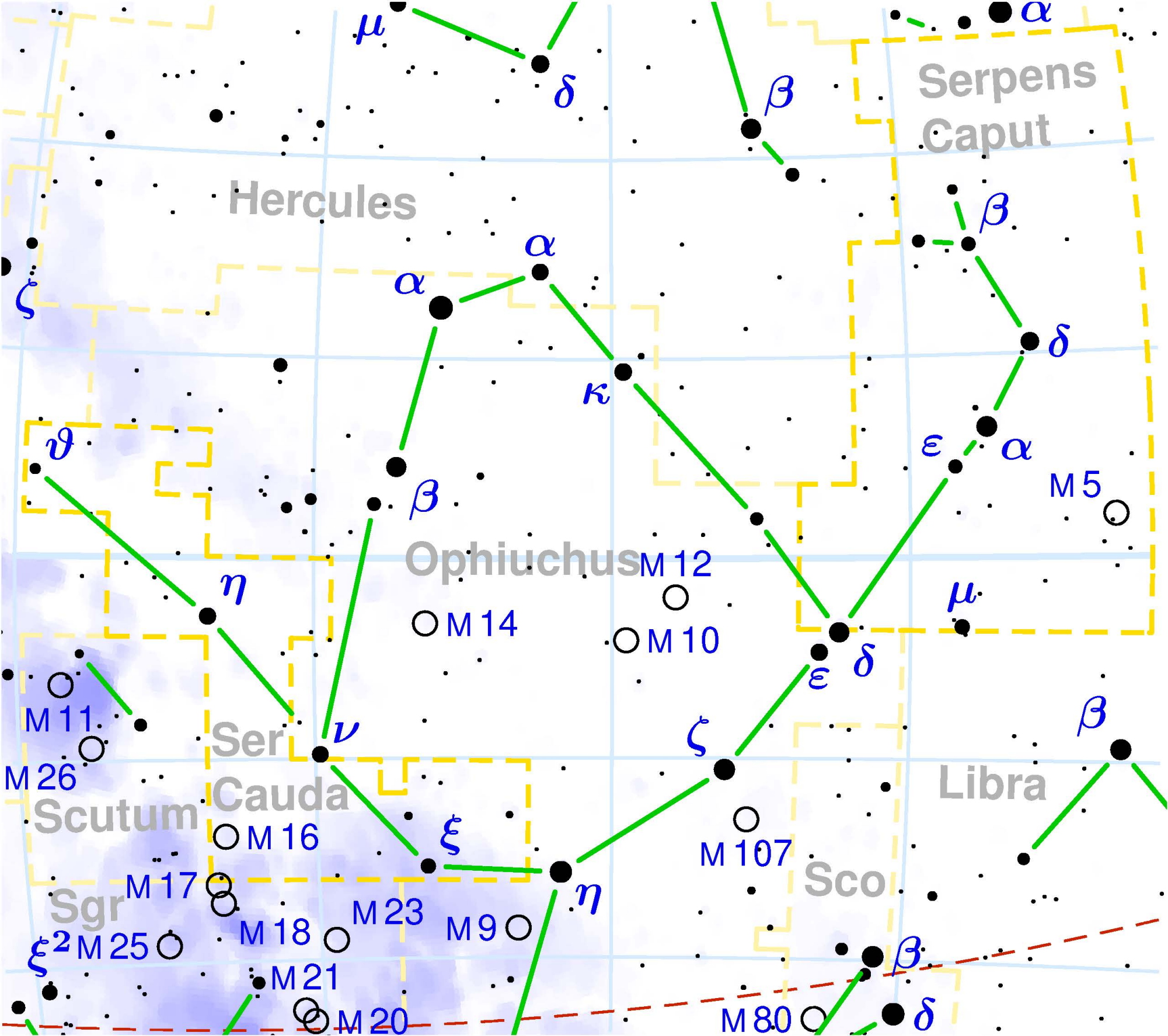

M 27
Vulpecula
γ
α
M 71
δ
Sagitta
β
Aquila
ζ
Her
γ
Del
Atair
Ser

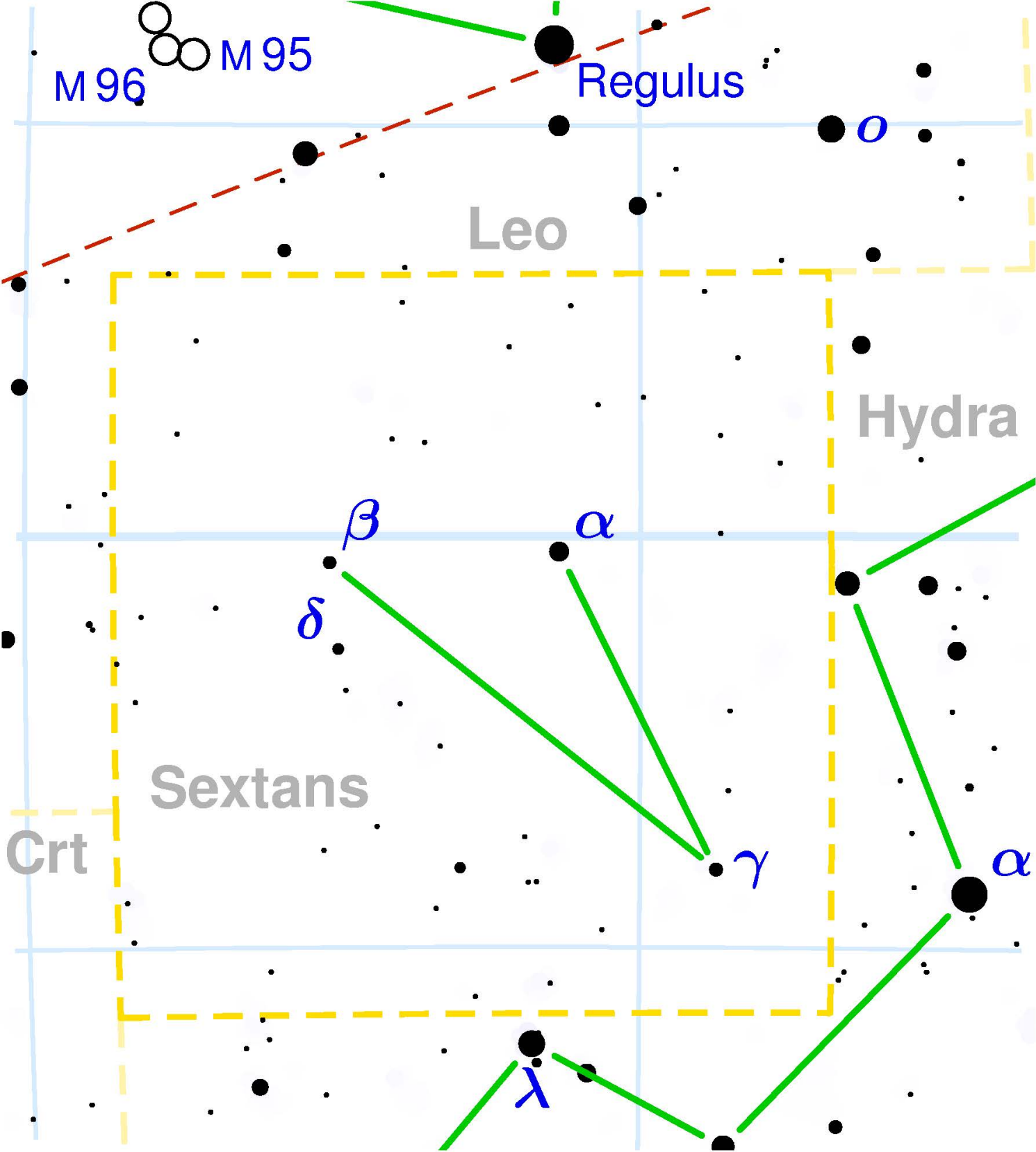

Scutum
M 16
Serpens
M 17
M 18
ξ
M 25
M 23
π
ξ²
M 21
M 20
M 22
λ
M 8
M 28
Oph
ϑ
τ
σ
ϕ
ζ
δ
M 54
M 69
γ²
M 6
M 55
M 70
Sagittarius
ε
M 7
η
λ
υ
Corona Australis
ι¹
κ


Serpens
M 107
ξ
η
M 9
Ophiuchus
β
Libra
M 23
M 80
M 21
M 20
δ
ϑ
M 8
Antares
M 4
π
M 19
Sgr
τ
M 62
υ
τ
M 6
Scorpius
γ²
ε
M 7
Lupus
λ
υ
μ²
μ¹
φ¹
η
η
ι¹
κ
NGC 6231
CrA
η
ζ²
γ
δ
ϑ
Norma
ε
Ara

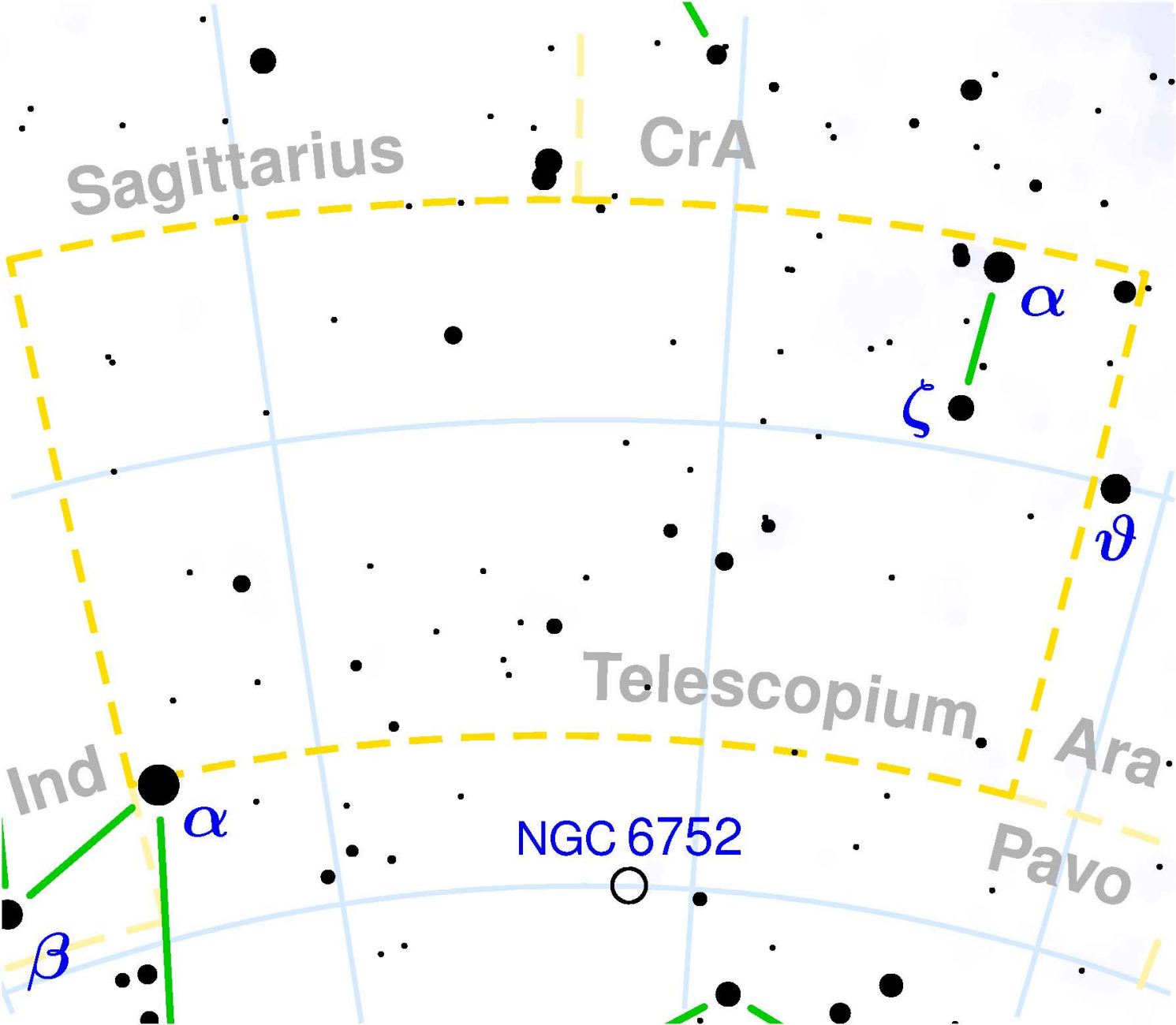

τ
β
88
Cetus
Aquarius
NGC 253
Sculptor
δ
α
PsA
Fomalhaut
γ
β
Fornax
NGC 55
Grus
α
Phoenix
γ

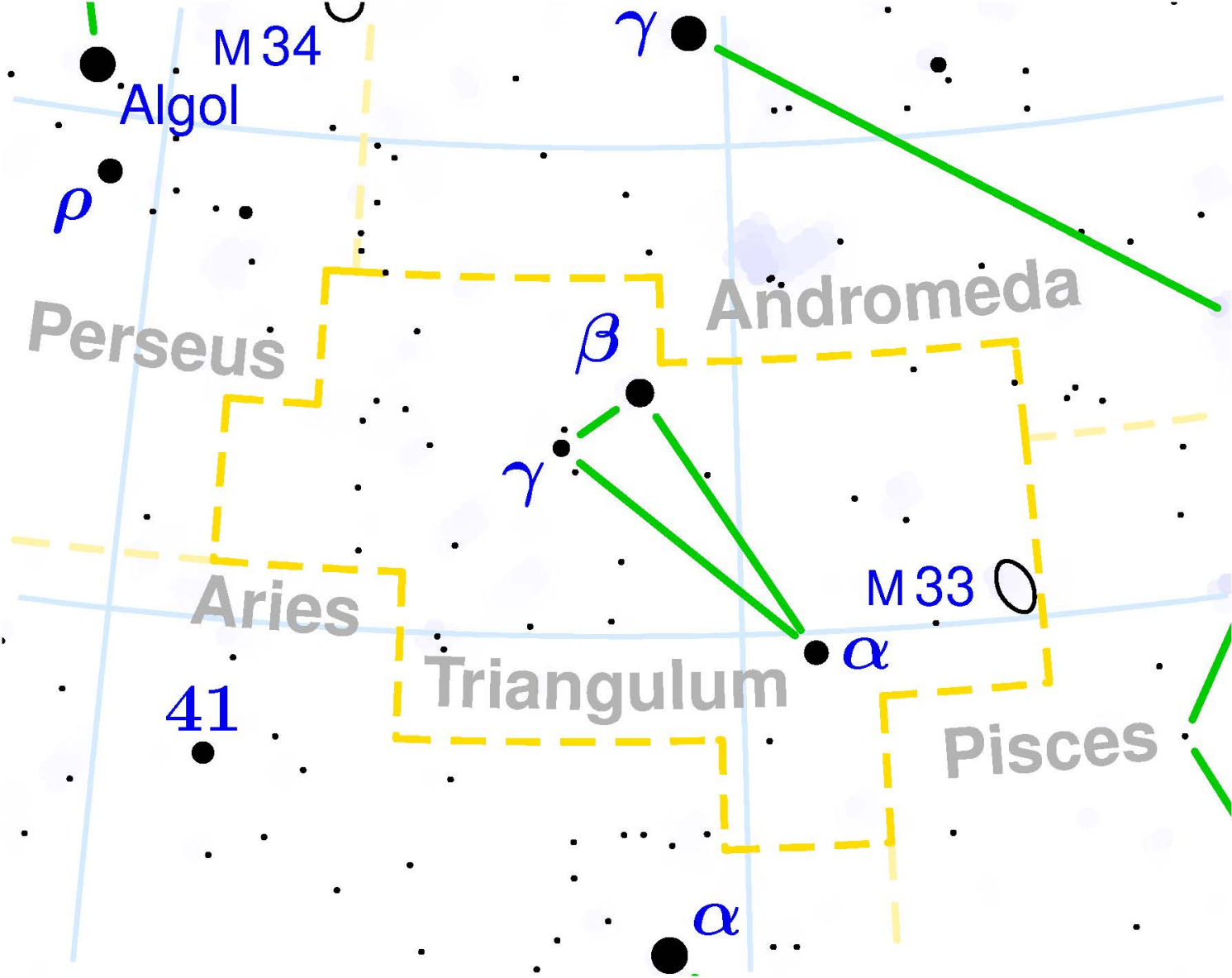

Serpens
η
λ
η
β
12
M 11
ε
α
ζ
M 26
δ
Aquila
Scutum
M 16
γ
M 17
Sagittarius
M 18

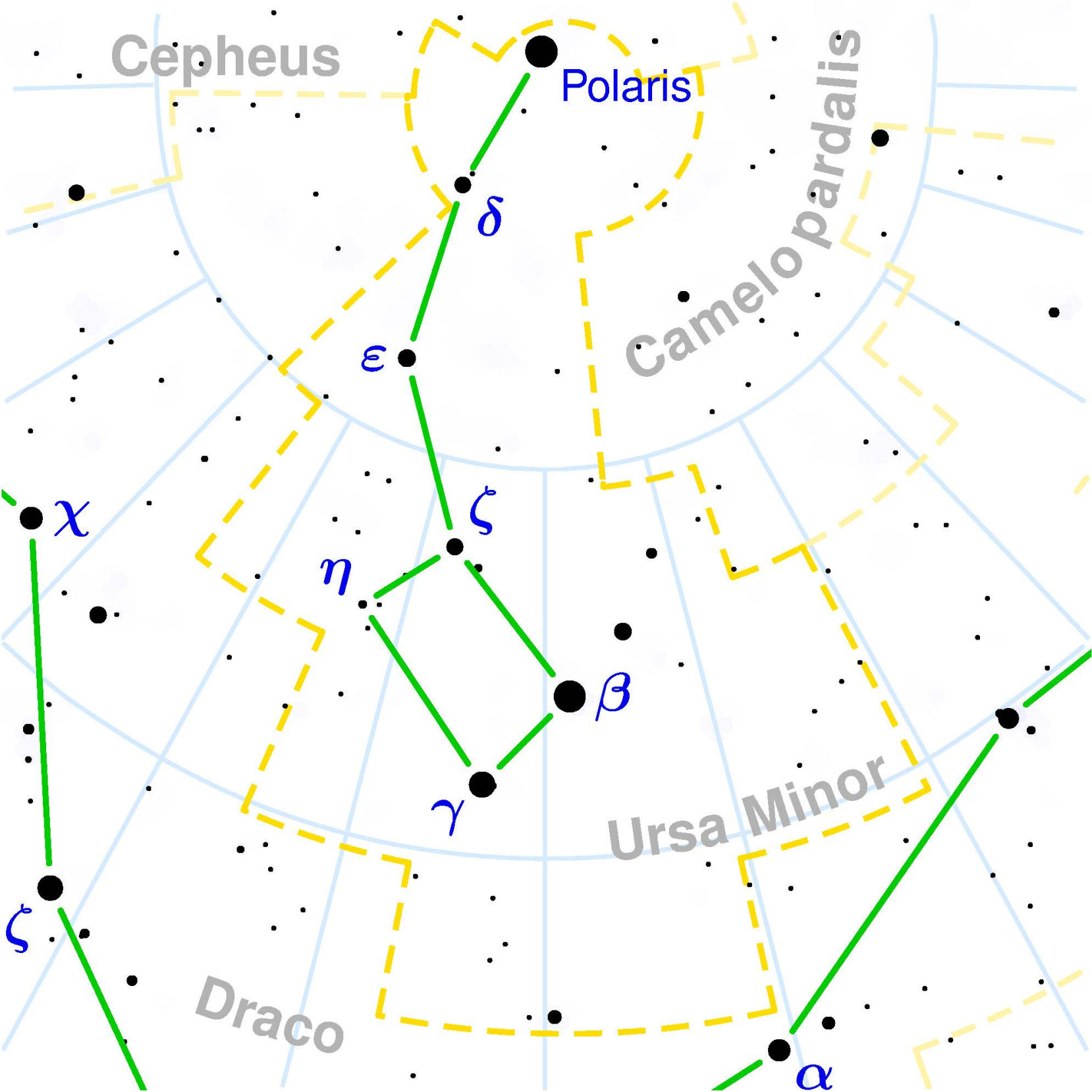

Serpens Caput
Hercules
Ophiuchus
Ser Cauda
Scutum
Sgr
Sco
Libra
M 5
M 10
M 11
M 12
M 14
M 16
M 17
M 18
M 20
M 21
M 23
M 25
M 26
M 80
M 107
M 9
α
β
γ
δ
ε
ζ
η
θ
κ
μ
ν
ξ

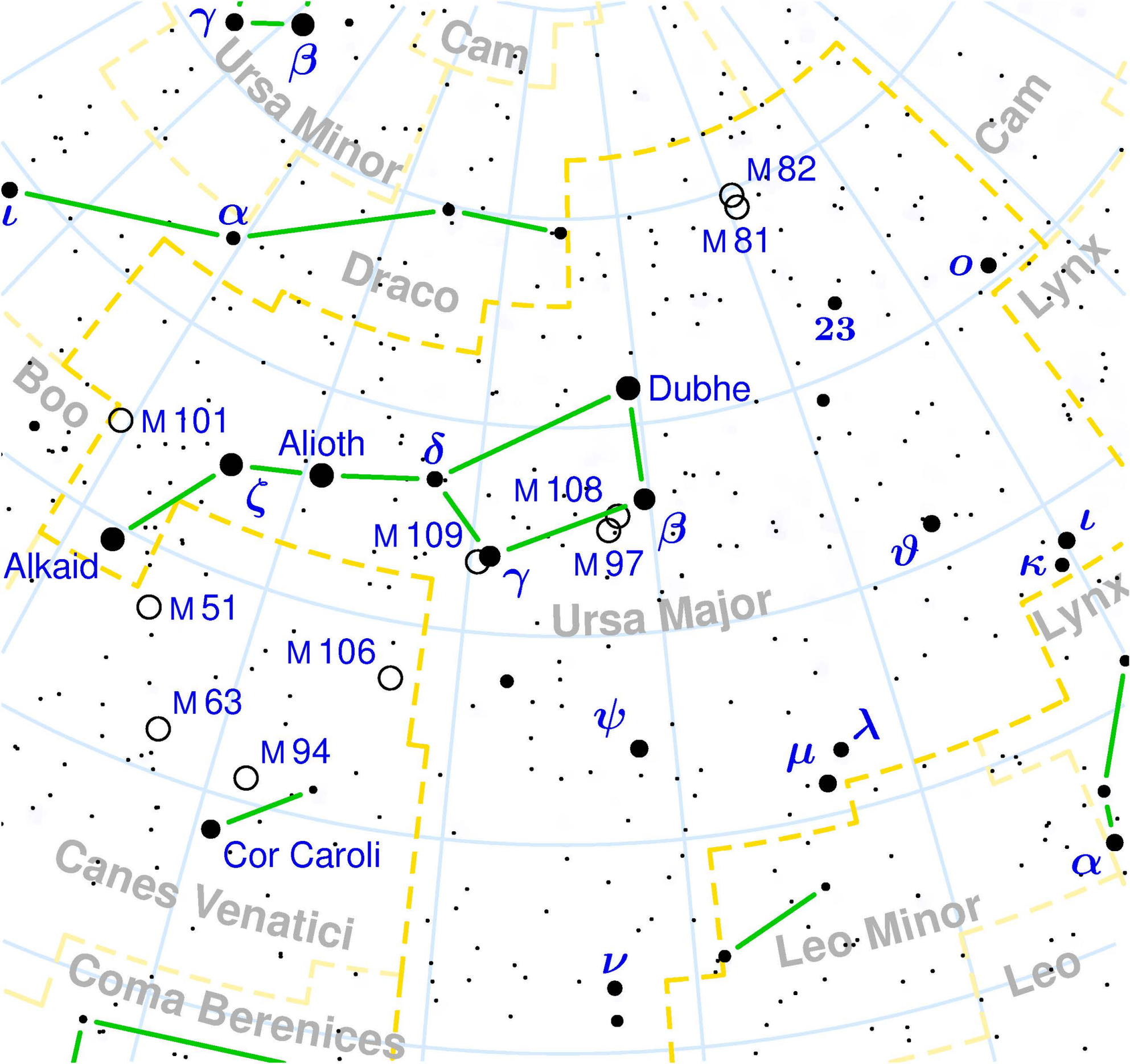

M 96
M 95
Regulus
o
Leo
Hydra
β
α
δ
γ
Sextans
Crt
α
λ

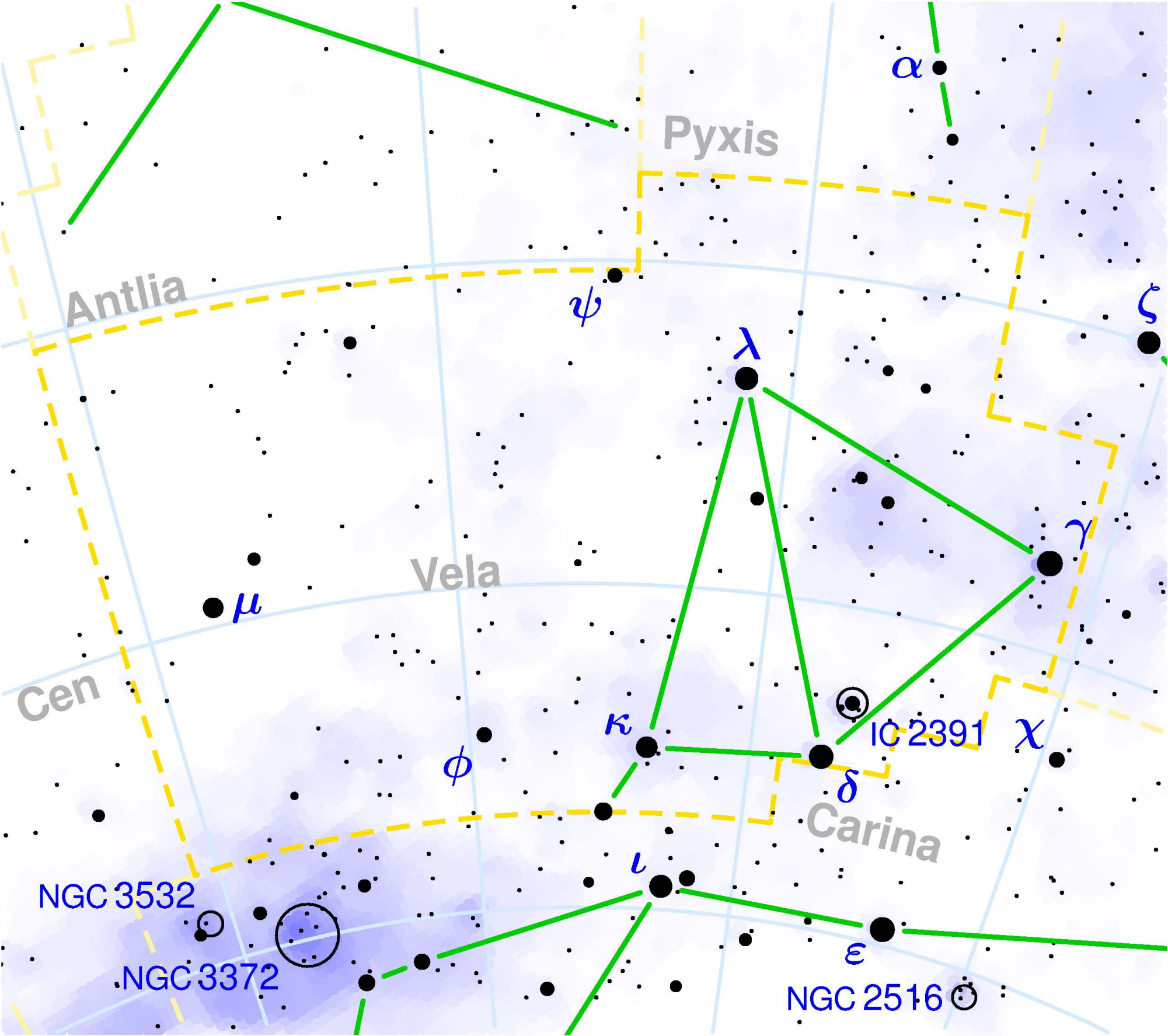
M 36
M 37
ι
Perseus
ζ
Ari
Auriga
β
Pleiades
M 1
ζ
ε
Taurus
Aldebaran
γ
ϑ^2
Orion
λ
λ
o
γ
π^3
π^4
M 78
δ

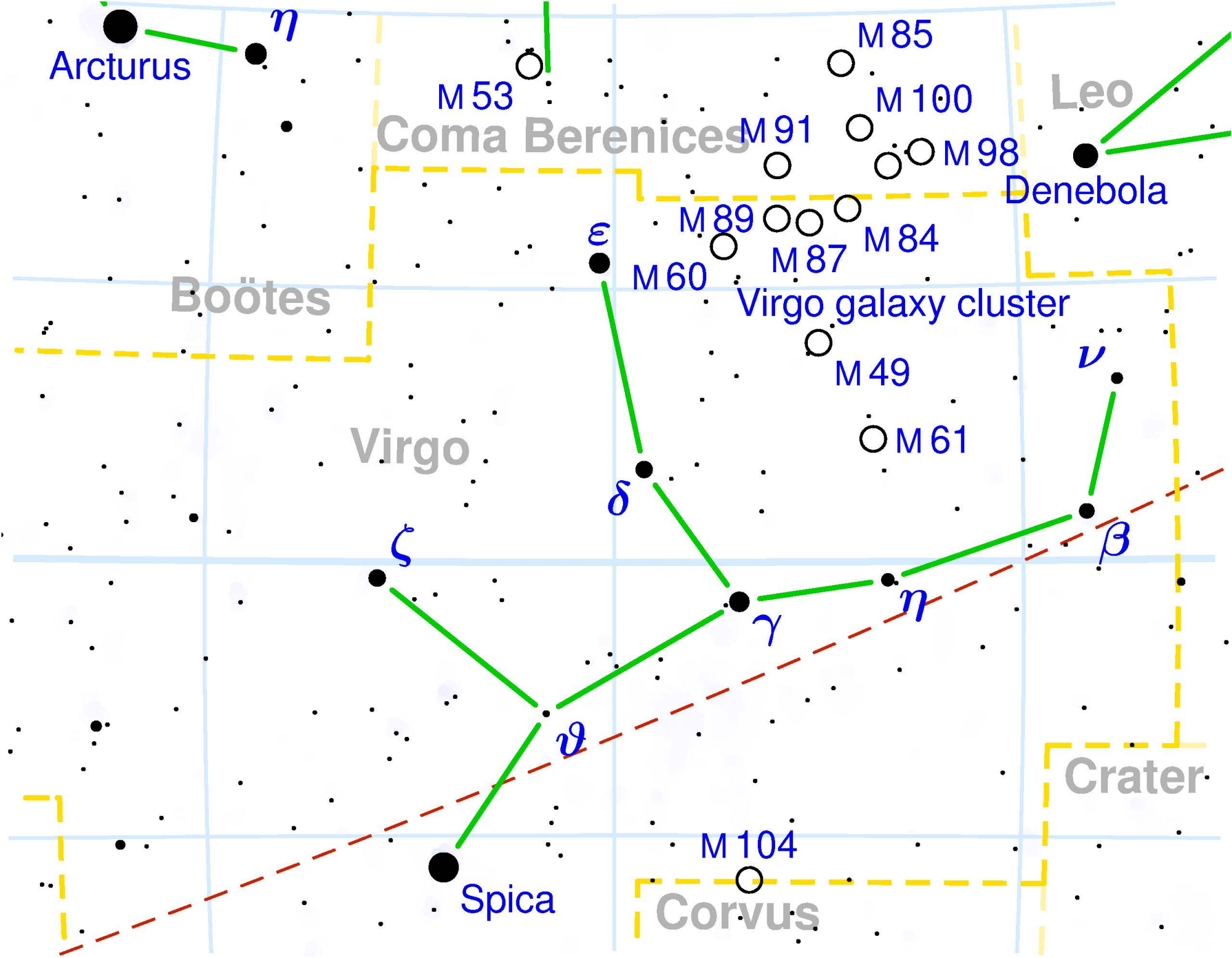

Sagittarius
CrA
α
ζ
ϑ
Telescopium
Ara
Ind
α
NGC 6752
Pavo
β

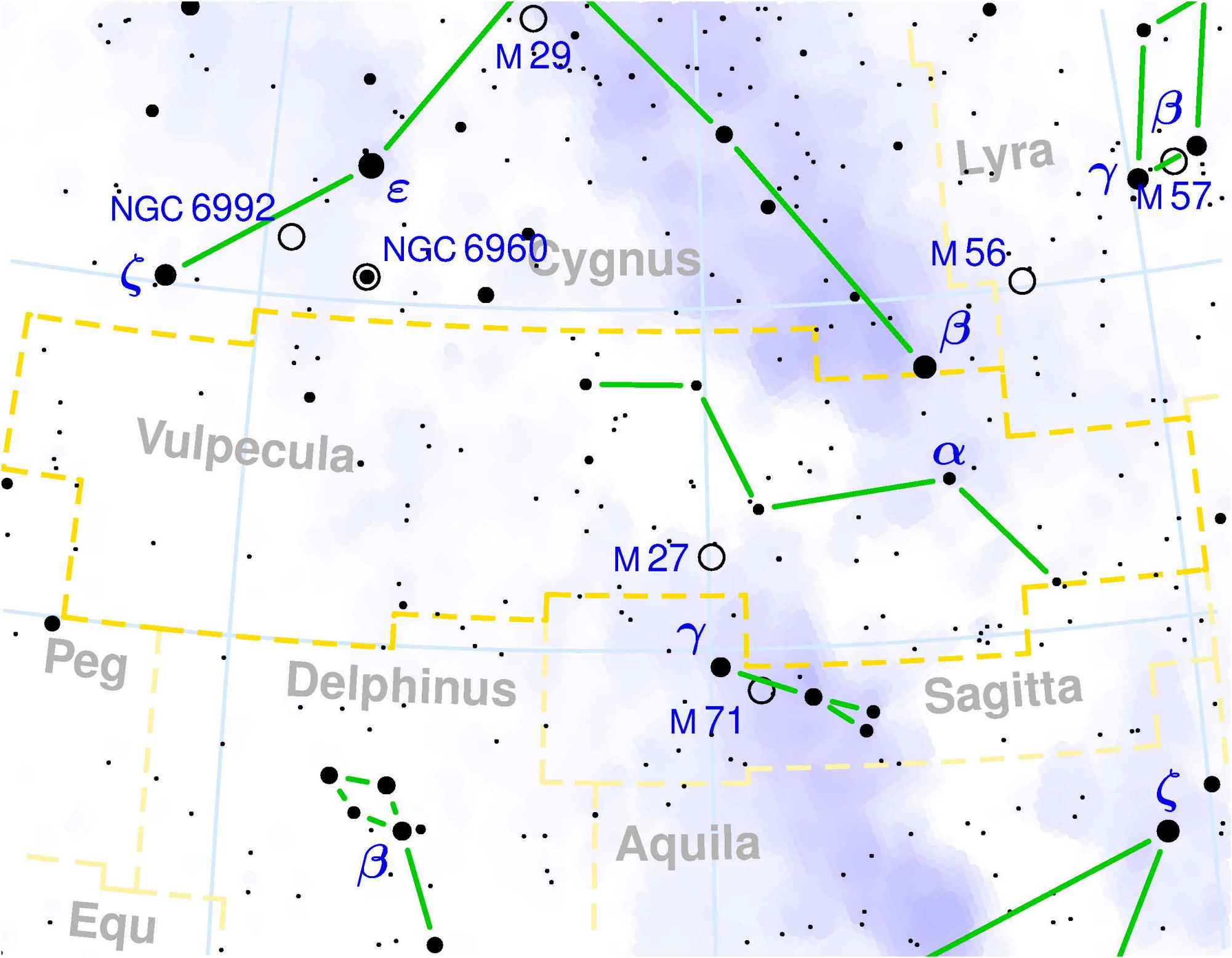

M 34
Algol
γ
ρ
Perseus
Andromeda
β
γ
M 33
α
Aries
Triangulum
41
Pisces
α


Cepheus
Polaris
δ
ε
ζ
η
β
γ
χ
ζ
α
Camelopardalis
Ursa Minor
Draco


γ
β
Ursa Minor
Cam
Cam
ι
α
M 82
M 81
Draco
o
Lynx
23
Boo
Dubhe
M 101
Alioth
δ
ζ
M 108
M 109
β
Alkaid
γ
M 97
ϑ
ι
κ
Lynx
M 51
Ursa Major
M 106
M 63
ψ
λ
μ
M 94
Cor Caroli
α
Canes Venatici
Leo Minor
ν
Leo
Coma Berenices


Pyxis
Antlia
Vela
Cen
Carina
α
ψ
ζ
λ
γ
μ
κ
IC 2391
χ
ϕ
δ
ι
NGC 3532
NGC 3372
ε
NGC 2516


Arcturus
η
M53
M85
M100
M91
M98
Leo
Denebola
Coma Berenices
ε
M89
M84
M87
M60
Boötes
Virgo galaxy cluster
M49
ν
Virgo
M61
δ
ζ
β
η
γ
ϑ
Crater
M104
Spica
Corvus


M 29
NGC 6992
ε
NGC 6960
ζ
Cygnus
Lyra
β
γ
M 57
M 56
β
Vulpecula
α
M 27
γ
Peg
Delphinus
M 71
Sagitta
ζ
β
Aquila
Equ